RAVEN

2014-15 Price Book

FIELD COMPUTERS
The in-cab "brains," with easy-to-read displays, intuitive menus and simple operation.

SLINGSHOT®
Add accuracy, save time and get Internet connectivity in the cab with Slingshot.

GUIDANCE & STEERING
Improve accuracy and reduce fatigue when you're in the field.

APPLICATION CONTROLS
Apply fertilizer and chemicals only where you really need them.

BOOM CONTROLS
Improve efficiency during spraying operations by managing boom height and section controls.

PLANTER & SEEDER CONTROLS
Accurate seeding and planting give you accuracy, input savings and total efficiency.

HARVEST CONTROLS
Monitor in real-time along with data recording and yield calculations in the cab while you harvest.

Table of Contents
Categorized Listing

Field Computers **1**
Viper® 4 1
Kits, Viper® 4 1
Cables, Viper® 4 1
Cables 1
GEN II 1
Components, Viper® 4 1
Software, Viper® 4 1
GPS Software, Viper® 4 2
Upgrade to GS Corrections and/or RTK 2
From Base Level 2
From SBAS + GLONASS 2
From SBAS + GS + GLONASS 2
OmniSTAR to GS Unlocks (No Charge Unlocks) 2
GPS Receiver - Compatibility Requirements 2
Manuals, Viper® 4 2
Viper Pro™ 3
Kits, Viper Pro™ 3
Cables, Viper Pro™ 3
GEN I 3
GEN II 3
Components, Viper Pro™ 3
Software, Viper Pro™ 3
Manuals, Viper Pro™ 3
Envizio Pro II® 4
Kits, Envizio Pro™ 4
Kits, Envizio Pro II® 4
Kits, Envizio Pro XL 4
Cables, Envizio Pro™, Envizio Pro II®, and Envizio Pro XL™ 4
GEN I 4
GEN II 4
Components, Envizio Pro™, Envizio Pro II®, and Envizio Pro 5
Software, Envizio Pro™, Envizio Pro II®, and Envizio Pro XL™ 5
GPS Software, SBAS/RTK Capable, Envizio Pro II® 6
Upgrade to GS Corrections and/or RTK 6
From Base Level 6
From SBAS + GLONASS 6
From SBAS + GS + GLONASS 6
OmniSTAR to GS Unlocks (No Charge Unlocks) 6
GPS Receiver - Compatibility Requirements 6
Manuals, Envizio Pro™, Envizio Pro II®, and Envizio Pro XL™ 7
Other Service Parts and Components 7
Interface Cables, Viper Pro™ and Envizio Pro II® 7
Raven ISO VT 8
Kits, Raven ISO VT 8
Cables 8
Compoments 8
Slingshot® **9**
Slingshot® 9
RTK Base Station Only 10
RTK Base Station Kits and Backup Power Supplies 10
WMS Annual Licenses 10
Base Station Antenna & Cables 10
Slingshot Field Hub Kits 10
Slingshot Field Hub Installation Kit 10
Slingshot Field Hub Only 10
Subscriptions & Activations 10
Interface Cables 10
Replacement Parts 11
Guidance & Steering **12**
Cruizer II™ 12
Kits, Cruizer II™ 12
Kits, Cruizer II™, Weather Resistant 12
Kits, Cruizer II™/Weather Resistant RTK 12
Cables & Components, Cruizer II™ 12
GEN I 12
GEN II 13
Cables & Components, Cruizer II™, Weather Resistant 13
GEN I 13
GEN II 13
Cruizer Care 13
Software, Cruizer II™ 13
Manuals, Cruizer II™ 13
CAN SmarTrax™ 3D 14
How to order CAN SmarTrax™ 3D with GEN I Cabling 15
How to order CAN SmarTrax™ 3D with GEN II Cabling 16
Controller Kits, CAN SmarTrax™ 3D 17
GEN I 17
GEN II 17
Cables, CAN SmarTrax™ 3D 17
GEN II 17
Machine-Specific Steering Kits, CAN SmarTrax™ 3D 18
AGCO 18
Application Equipment 18
Tractor 18
Apache 18
Buhler 19
Application Equipment 19
Tractor 19
CaseIH 20
Application Equipment 20
Combine 21
Tractor 21
CAT 21
Ford New Holland 21
GVM 21
Hagie 22
John Deere 22
Application Equipment 22
Combine 22
Tractor 22
Lexion 22
Macdon 22
Mertz 23
Miller 23
McCormick 23
New Holland 23
Application Equipment 23
Combine 23
Tractor 23
RBR 23
Servspray 24
Upgrades, CAN SmarTrax™ 3D 24
Replacement Parts, CAN SmarTrax™ 3D 24
SmarTrax™ MD 25
Kits, SmarTrax™ MD 26
GEN II 26
Install Kits 26
Generic 26
AGCO 26
CaseIH 26
Fendt 26
Ford 26
John Deere 26
New Holland 27
Versatile 27

Table of Contents
Categorized Listing

- Components 27
- Cables 27
- Enable Switches 27
- Spline Adapter Sets 27

GPS Receivers 28
- Kits, GPS Receivers 28
- Cables, GPS Receivers 28
- Components, GPS Receivers 28
- Software, GPS Receivers 29
  - P300 with USB (Upgrade to GS Corrections and/or RTK) 29
    - From Base Level 29
    - From SBAS + GLONASS 29
    - From SBAS + GS + GLOSS 29
  - P300 with USB (OmniSTAR to GS Unlocks (No Charge 29
  - P300 (Compatibility Requirements) for GS 29
- Tilt 30
- Manuals, GPS Receivers 30
- Antennas 30

Lightbars 31
- Kits, Lightbars 31
- Cables, Lightbars 31
- Components, Lightbars 31
- Switchboxes, Lightbars 31
- Miscellaneous, Lightbars 31
- Manuals, Lightbars 32

Boom Controls 33

AutoBoom® 33
- PowerGlide 33
- 33
  - PowerGlide Controller Kit 34
  - Self-Propelled Kits, PowerGlide 34
    - AGCO 34
    - CaseIH 34
    - Equipment Technologies 34
    - Miller 34
    - Willmar 34
  - Pull-Type Kits, PowerGlide 34
    - Fast 34
    - Flexicoil 34
    - Schaben 34
    - Summers 34
    - Top Air 35
  - Axle Kits 35
    - Kits consisting of two strut assemblies 35
    - Machine-Specific Kits 35
  - Touchdown "Little Wheel" Wheel Kits (optional) 35
- CAN PowerGlide Plus 36
  - How to order AutoBoom® PowerGlide Plus with GEN II 37
  - How to order AutoBoom® PowerGlide Plus with ISOBUS 38
  - CAN PowerGlide Plus Controller Kits 39
  - CAN AutoBoom Console Kits 39
  - ISO PowerGlide Plus Controller Kits 39
  - CAN Power Tee Kit & Extension Cables 39
  - ISO Adapter & Implement Extension Tee Cables 39
  - Self-Propelled Kits, CAN PowerGlide Plus 40
    - AGCO 40
    - Apache 40
    - Buhler 40
    - CaseIH 40
    - GVM 40
    - John Deere 40
    - Miller 41
    - Spra-Coupe 41
    - Willmar 41
  - Pull-Type Kits, CAN PowerGlide Plus 41
    - Bestway 41
    - Fast 41
    - Flexicoil 41
    - Gregson 41
    - Hardi 42
    - Miller 42
    - Redball 42
    - Schaben 42
    - Summers 42
    - Top Air 42
  - PowerGlide Plus to UltraGlide Upgrade (Square Coil Valve) 42
  - PowerGlide Plus to UltraGlide Upgrade (Round Coil Valve) 43
  - ISO PowerGlide Plus to UltraGlide Upgrade 43
  - Touchdown "Little Wheel" Wheel Kits (optional) 43
  - G1 to UltraGlide Update 44
- CAN UltraGlide 45
  - How to order AutoBoom® UltraGlide with GEN II Cabling 46
  - How to order AutoBoom® UltraGlide kit with ISOBUS Cabling 47

AutoBoom® 48
- CAN UltraGlide 48
  - CAN UltraGlide Controller Kits 48
  - CAN AutoBoom Console Kits 48
  - ISO UltraGlide Controller Kits 48
  - CAN Power Tee Kit & Extension Cables 48
  - ISO Adapter & Implement Extension Tee Cables 48

AutoBoom® 49
- CAN UltraGlide 49
  - Self-Propelled Kits, CAN UltraGlide 49
    - AGCO 49
    - Apache 49
    - Buhler 49
    - CaseIH 49
    - GVM 49
    - Hagie 49
    - John Deere 50
    - Miller 50
    - Miller ISOBus 50
    - New Holland 50
    - New Holland ISOBus 50
    - Spra-Coupe 50
    - Willmar 51
  - Pull-Type Kits, CAN UltraGlide 51
    - Bestway 51
    - Fast 51
    - Flexicoil 51
    - Gregson 51
    - Hardi 51
    - Miller 51
    - MS 51
    - Redball 51
    - Schaben 52
    - Sprayer Specialties 52
    - Summers 52
    - Top Air 52
  - CAN Center Sensor Kits 52
  - Center Rack Control Upgrade Kits 52
  - CAN Dual Ultrasonic Sensor Kits 52
    - For Systems With Inner & Outer Sensor Connections 52
    - For Systems With A Single Node Connection 53
  - Standard Gauge Wheels (optiol) 54
- Replacement Parts, AutoBoom® 55

Table of Contents
Categorized Listing

G1 Replacement Parts 55
G2 Replacement Parts 55
PowerGlide / PowerGlide Plus / UltraGlide Replacement 56
Open Center Conversion Kits, CAN PowerGlide Plus 57
Boom Sense or Open Center/LS Coil Cables 57
Center Rack Control Cables 57
US Sensor Extension Cables 57
Update Cables 58
AccuBoom™ 59
How to order AccuBoom™ with GEN I Cabling 60
How to order AccuBoom™ with GEN II Cabling 61
Node Control Kits 62
Remote Section Control 62
Self-Propelled Kits, AccuBoom™ 62
AGCO 62
Serial 62
CAN 62
CaseIH 62
Serial 62
CAN 63
Equipment Technologies 63
Serial 63
CAN 63
GVM 63
Serial 63
CAN 63
Hagie 63
Serial 63
CAN 63
John Deere 64
Miller 64
Serial 64
CAN 64
New Holland 64
Serial 64
CAN 64
Redball 64
CAN 64
Spray-Air 64
CAN 64
Spra-Coupe 64
Serial 64
CAN 64
Standard Pull Type Sprayers 65
Serial 65
CAN 65
Generic Kits 65
Serial 65
CAN 65
SmartBoom™ 66
How to Order SmartBoom™ Kits 66
Controller Kit 67
Cable Kits 67
Standard 67
AGCO 67
CaseIH 67
John Deere 67
Tee Jet 67
Universal 67
Interface Cables 67
Application Controls 68
SCS Consoles 68
SCS 4400™ 68
SCS 4600™ 68
Cables, SCS 4400/4600 68
SCS 5000™ 68
SCS 4070™ 68
SCS 440™ 68
SCS 450/460™ 69
SCS 660™ 69
Cables, SCS 440/450/460/660™ 69
SCS 11™ 69
SCS 203™ 69
SCS 223™ 69
SCS 330™ 70
Pressure Transducer 70
CAN Nodes 70
Single Product Node Cables (GEN II) 70
CAN Components & Cabling 71
GEN I 71
ISO Product Control 72
Kits, ISO Product Control 72
Kits, Raven ISOBUS Switch Box 72
ISOBUS Hitch Cables 72
Components, ISO Product Control 72
RFM Flow Meters 73
Granular Encoder 73
Granular Options 73
Valve Products 74
Control Valves 74
On/Off Valves 74
Manual System Control Valves 74
Hydraulic Control Valves 75
Check Valves 75
Miscellaneous 75
Speed Sensors, Cables, and Components 75
Speed Sensors 75
Radar Speed Sensor Interface Cable 76
Raven Radars 76
Dickey-John/Vansco Radars 76
Magvox/Phillips Radars 76
TRW Radars 76
Components Included in Cable Assemblies 76
Miscellaneous Components 77
AccuFlow™ 78
Kits, Single Cooler 78
Kits, Other 78
Cables & Components 78
Replacement Parts, AccuFlow™ 79
Controller Kits, CAN AccuFlow™ 80
Cables 80
NH3 Cables for Multi Section Bar 80
NH3 Cables for Single Section Bar 80
NH3 On/Off Valve Extension Cables 80
AccuFlow™ Vortex & AccuFlow HP™ Plus 81
Kits, AccuFlow™ Vortex & AccuFlow HP™ Plus 81
Cables, AccuFlow HP™ Plus 81
AccuFlow™ Vortex & AccuFlow HP™ Plus Replacement Parts 81
Inlet Plumbing Components 81
Vortex Cooler and Bleed Components 82
AccuFlow HP™ Plus Pump and Plumbing Components 82
Flow Meter Components 82
Gauge Tree and Sensor Components 82
Control and On/Off Valve Components 82
Outlet Plumbing Components 82
Replacement Parts, AccuFlow HP ™ 82

Table of Contents
Categorized Listing

Sidekick Pro™: Direct Injection 83
Kits, Sidekick Pro™ 83
Cables, Sidekick Pro™ 83
Flow Monitor Cables (3 pin weatherpack connector) 83
Components, Sidekick Pro™ 83
ISO Injection Pumps, Sidekick Pro™ 84
Components & Cables, ISO Injection 84
Sidekick™: Direct Injection 84
SCS-Sidekick™ 84
Components, SCS-Sidekick™ 84
Cables, SCS-Sidekick™ 84
Injection Check Valves 84
Miscellaneous Components, SCS-Sidekick™ 84
Injection Components 85
Motor Controls 85
Mix-All Agitators (48" shaft cut to desired length) 85
In-Line Mixers 85
Tanks and Saddles 85
Agitator Kits 85
Switch Pro™ 86
Kits, Switch Pro™ 86
GEN I 86
Cables, Switch Pro™ 86
GEN I 86
Components, Switch Pro™ 86
Optiol RAM Mount Components to Remote-Mount Consoles 87
Raven CAN GEN II Product Controls 88
Kits, CAN Product Controller 88
GEN II 88
Kit, Level III Node 88
Kit, Level I Node 88
Raven CAN GEN II Product Controls 88
Components, CAN Product Controller 88
Authorization Codes, CAN Product Controller 89
Power/CAN Chassis and Field Computer/Console Cab Cables 89
Cables, CAN Product Controller 89
Cables, CAN Multi-Product System 89
Kits, Raven CAN Switch Box 90
Components, Raven CAN Switch Box 90
Components, RAM Mount 90
Chassis Cables 90
GEN II 90
Power/CAN Tee Implement Extensions 90
GEN II 90
Power/CAN Extension Cables 90
GEN II 90
Cables, CAN Product Control 91
Flow Max™ 92
Flow Max™ 221 Flow Monitor 92
Flow Max™ 110 Flow Monitor 92
Flow Max™ 810 Flow Monitor 92
Flowmeters 92
On/Off Valves 92
Anti-Ice 93
DCS 400 Liquid Anti-Ice 93
DCS 410 Liquid Anti-Ice 93
DCS 300 Liquid Anti-Ice 93
DCS 310 Liquid Anti-Ice 93
DLA 336 94
DCS 700/710 Liquid Anti-Ice 94
Tractor Components 95
Radar Speed Sensor Cables 95
Raven Radar 95
Raven Radar to Third Party Adapter 95
Third Party Radar to Raven Speed Sensor Interface Cable 95
Speed Sensor Extension Cables 95
Planter & Seeder Controls **96**
OmniRow® 96
Raven OmniRow® Planter Monitoring & Control Systems 96
How To Order 97
How To Order (continued) & Hydraulic Flow Requirements 98
John Deere 99
Level I OEM Sectiol Base Kit 99
Level II Raven Sectiol Kits 99
Level III Brand Specific MultiRow Kits 99
Level III MultiRow Kits 99
Level IV IndiRow Kits 99
Kinze 100
Level I OEM Sectiol Base Kit 100
Level II Raven Sectiol Kits 100
Level III Brand Specific MultiRow Kits 100
Level III MultiRow Kits 100
Level IV IndiRow Kits 100
Accessories 100
CaseIH 101
Level I OEM Sectiol Base Kit 101
Level II Raven Sectiol Kits 101
Level III Brand Specific MultiRow Kits 101
Level III MultiRow Kits 101
Accessories 101
AGCO White 102
Level I OEM Sectiol Base Kit 102
Level II Raven Sectiol Kits 102
Level III Brand Specific MultiRow Kits 102
Level III MultiRow Kits 102
Extension Cables 103
Power/CAN Extension Cables 103
Planter Seed Sensor Harness Extension Cables 103
Accessory Cables 103
Motor Return Kits 103
Replacement Parts 104
Planter Auxiliary Monitoring & Product Control 104
Planter Auxiliary Sensors 104
Planter Auxiliary Monitoring & Control Cables 105
Auxiliary Monitoring & Control Extension Cables 105
Power/CAN Extension Cables 106
Power/CAN T Extension Cables 106
OmniSeed™ 107
How to Order an OmniSeed™ System 108
Generic OmniSeed Air Cart Kits 109
Brand Specific Air Cart Install Kits (Select One Kit per bin) 109
Air Cart Accessories 109
Run Blockage Powered By Agtron (Reference Raven drawing 109
Auxiliary Product Control (Reference Raven drawing 109
Down Pressure Monitoring (Reference Raven drawing 110
Extension Cables 110
Auxiliary Product Control Extension Cables 110
Down Pressure/Proximity Switch Extension Cables 110
Power/CAN Extension Cables 110
Power/CAN ‘T’ Extension Cables 110
Viper Pro Software 110
Replacement Parts 111
AccuRow™ 112
Kits, AccuRow™ 113
Extension Cables, AccuRow™ 113
Power/CAN Extension Cables 113

Table of Contents
Categorized Listing

Accessory Cables	113
Replacement Parts	113
CropStart™	114
Kits, CropStart™	114
Cables/Components, CropStart™	114
Cables/Components, CropStart II™	114
Manuals, CropStart™	114
Harvest Controls	**115**
SmartYield™ Pro	115
Kits, SmartYield™ Pro	116
Combine Console and Power Harness	116
Components, Header Height Sensor	116
Replacement Parts/Accessories	116
Replacement Parts	**117**

Field Computers

Viper® 4

Kits, Viper® 4

Note: Customers ordering both Viper 4 and Slingshot must also order cable part number 1-115-0172-090 (Cable, Viper 4 Ethernet)

Kit, Viper 4 without GPS	1-117-5010-010B	$4,995.00
Kit, Viper 4, GPS No Antenna	1-117-5010-010L	$6,695.00
Kit, Viper 4, GPS, MBA-6 Antenna	1-117-5010-010W	$6,995.00
Kit, Viper 4, GPS, MBA-6 Antenna, Slingshot® GS correction	1-117-5010-010C	$8,995.00
Kit, Viper 4 with GPS, MBA-6 Antenna, RTK, GLONASS	1-117-5010-010KG	$10,995.00

Cables, Viper® 4

Cables

Cable, Viper 4 adapter to Viper Pro / Envizio Pro cabling	1-115-0172-023	$171.00

GEN II

Cable, Viper 4 Chassis Interface	1-115-0172-025	$500.00
Cable, Power, Tracked and Row Crop Tractors with Front Mounted Batteries	1-115-0171-915	$490.00
Cable, Power, 4WD Tractors with mid Mounted Batteries	1-115-0171-936	$439.00
Cable, Power, CaseIH / Challenger / New Holland Row Crop Tractors	1-115-0171-937	$510.00
Cable, Power, John Deere and Buhler Row Crop Tractors	1-115-0171-938	$439.00
Cable, Power, Generic Row Crop Tractors (steering and AccuBoom systems only)	1-115-4001-085	$232.00
Cable, Power, Field Hub	1-115-0171-999	$96.00

Components, Viper® 4

Cable, 15' Antenna	1-115-0171-117	$75.00
Kit, Mounting, RAM Vesa Plate	1-117-0171-132	$100.00
Watchdog Weather Sensor Kit (Viper 4 also requires Weather Station Key)	1-117-0171-138	$1,955.00
Cable, Viper 4 Ethernet	1-115-0172-090	$57.00
4 GB USB Flash Drive	1-524-0002-065	$30.00

Software, Viper® 4

Viper 4 Single Product VRA	1-077-0180-100	$750.00
Viper 4 Multi-Product VRA (if already have single product VRA)	1-077-0180-101	$1,000.00
Viper 4 Combo VRA (single and multi)	1-077-0180-102	$1,750.00
Weather Station	1-077-0180-103	$400.00
GreenSeeker®	1-077-0180-123	$500.00

Field Computers

Viper® 4

GPS Software, Viper® 4

Upgrade to GS Corrections and/or RTK

Note: Customers with no existing OmniSTAR unlocks wanting to upgrade to GS Coreections and/or RTK.

From Base Level

Note: Receiver and/or field computer comes capable of SBAS, which includes WAAS, EGNOS, MSAS

GLONASS (only adds GLONASS to Base Level)	1-077-0180-083	$500.00
GS (includes GLONASS)	1-077-0180-116	$2,000.00
RTK (includes GLONASS)	1-077-0180-117	$4,000.00

From SBAS + GLONASS

GS (includes GLONASS)	1-077-0180-119	$1,500.00
RTK (includes GLONASS)	1-077-0180-118	$3,500.00

From SBAS + GS + GLONASS

RTK (includes GLONASS)	1-077-0180-120	$2,000.00

OmniSTAR to GS Unlocks (No Charge Unlocks)

Note: Customers with existing OmniSTAR unlocks wanting to upgrade to GS Corrections will need to unlock the GS capability in their GPS receiver or Raven field computer. There will be NO COST to do this, however the normal order and authorization process will need to be followed with the below part numbers.

SBAS + OmniSTAR to SBAS + GS + GLONASS	1-077-0180-124	$0.00
SBAS + OmniSTAR + GLONASS to SBAS + GS + GLONASS	1-077-0180-125	$0.00
SBAS + OmniSTAR + RTK to SBAS + GS + GLONASS	1-077-0180-126	$0.00
SBAS + OmniSTAR + RTK + GLONASS to SBAS + GS + RTK + GLONASS	1-077-0180-127	$0.00

GPS Receiver - Compatibility Requirements

Description	REV	Software	GPS Engine Software
Viper 4	All	2.0 or higher	OEM060400RNOOO

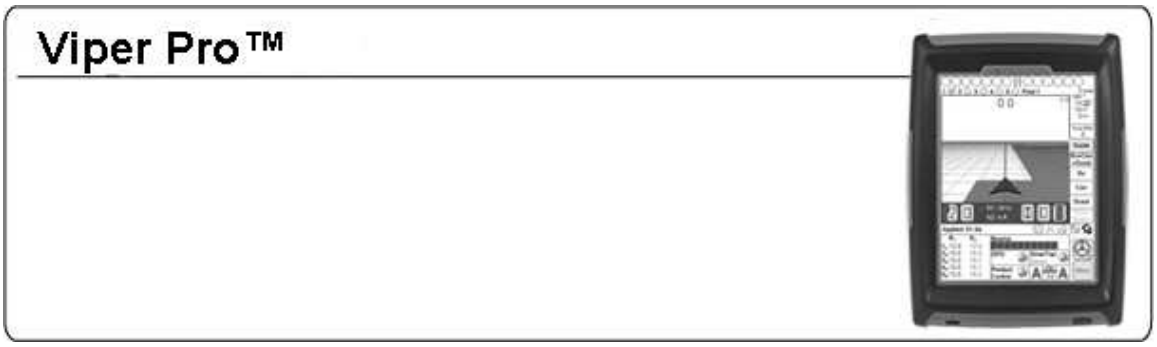
NOTE: If you have an older version receiver and/or field computer that is not compatible with the requirements listed above and you are seeking an unlock for OmniSTAR corrections, please utilize Raven SmartQuote to obtain the authorization code.

Manuals, Viper® 4

Viper 4 Quick Reference Guide	1-016-0171-539	$21.00

Field Computers

Viper Pro™



Kits, Viper Pro™

Kit, Viper Pro w/ Guidance/Single Product VRA, GEN I main cable	1-117-0171-112	$5,210.00

Cables, Viper Pro™

GEN I

Cable, Viper Pro / Envizio Pro (II) Main	1-115-0171-746	$249.00
Cable, Viper Pro / Envizio Pro (II) Auxiliary	1-115-0171-745	$130.00
Cable, Viper Pro / Envizio Pro (II) Combination (Main/Auxiliary)	1-115-0171-744	$363.00

GEN II

Cable, Power, Tracked and Row Crop Tractors w/Front Mounted Batteries	1-115-0171-915	$490.00
Cable, Power, 4WD Tractors w/ mid Mounted Batteries	1-115-0171-936	$439.00
Cable, Power, CaseIH/Challenger/New Holland Row Crop Tractors	1-115-0171-937	$510.00
Cable, Power, John Deere and Buhler Row Crop Tractors	1-115-0171-938	$439.00
Cable, Power, Generic Row Crop Tractors (steering and AccuBoom systems only)	1-115-4001-085	$232.00
Cable, Viper Pro/Envizio Pro (II) Chassis Interface	1-115-0172-001	$444.00
Cable, Power, Field Hub	1-115-0171-999	$96.00

Components, Viper Pro™

Viper Pro (Console only w/ Guidance/Single Product VRA)	1-063-0172-879	$4,995.00
Viper/4000 Series Mounting Bracket	1-107-0171-415	$37.00
Viper Boom Speed/Single Product Node Mounting Bracket	1-117-0159-993	$123.00
4 GB USB Flash Drive	1-524-0002-065	$30.00
Watchdog Weather Sensor Kit (Viper Pro also requires Weather Station Key)	1-117-0171-138	$1,955.00

Software, Viper Pro™

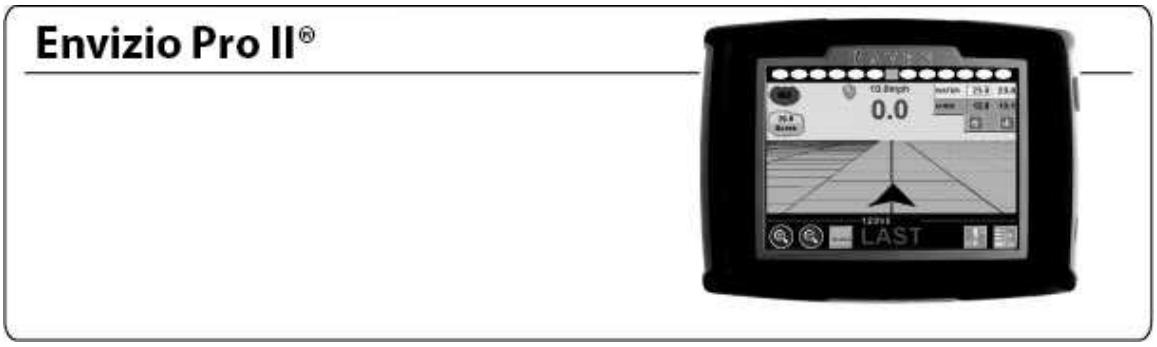
Case IH/SeedHawk Viper Pro Single Product VRA	1-077-0180-004	$750.00
Viper Pro Multi-Product VRA	1-077-0171-152	$1,000.00
Weather Station	1-077-0180-030	$400.00

Manuals, Viper Pro™

Viper Pro Manual	1-016-0171-122	$20.00
Viper Pro Quick Start Guide	1-016-0171-147	$13.00

Field Computers

Envizio Pro II®



Kits, Envizio Pro™

***Envizio Pro II systems include the fully scalable GPS engine. Power and interface cables are not included.**

Kit, Envizio Pro without GPS (basic GEN I power cable included)	1-117-0171-128	$2,995.00
Kit, Envizio Pro without GPS	1-117-5010-002	$2,840.00

Kits, Envizio Pro II®

Envizio Pro II systems include the fully scalable GPS engine. Power and interface cables are not included.

Kit, Envizio Pro II, (Envizio Pro II console and manual only)	1-117-5010-009L	$3,695.00
Kit, Envizio Pro II, MBA-6, WAAS/SBAS	1-117-5010-009W	$3,995.00
Kit, Envizio Pro II, MBA-6, Slingshot® GS correction	1-117-5010-009C	$5,995.00
Kit, Envizio Pro II, MBA-6, Satellite GS correction	1-117-5010-009D	$5,995.00
Kit, Envizio Pro II, MBA-6, RTK / GLONASS*	1-117-5010-009KG	$7,995.00

Kits, Envizio Pro XL

Kit, Envizio Pro XL	1-117-5010-007	$3,995.00
Kit, Envizio Pro XL, Single VRA enabled	1-117-5010-007V	$4,745.00

Cables, Envizio Pro™, Envizio Pro II®, and Envizio Pro XL™

GEN I

Cable, Viper Pro / Envizio Pro (II) Main	1-115-0171-746	$249.00
Cable, Viper Pro / Envizio Pro (II) Auxiliary	1-115-0171-745	$130.00
Cable, Viper Pro / Envizio Pro (II) Combination (Main/Auxiliary)	1-115-0171-744	$363.00

GEN II

Cable, Power, Tracked and Row Crop Tractors w/Front Mounted Batteries	1-115-0171-915	$490.00
Cable, Power, 4WD Tractors w/ mid Mounted Batteries	1-115-0171-936	$439.00
Cable, Power, CaseIH/Challenger/New Holland Row Crop Tractors	1-115-0171-937	$510.00
Cable, Power, John Deere and Buhler Row Crop Tractors	1-115-0171-938	$439.00
Cable, Power, Generic Row Crop Tractors (steering and AccuBoom systems only)	1-115-4001-085	$232.00
Cable, Viper Pro/Envizio Pro (II) Chassis Interface	1-115-0172-001	$444.00
Cable, Power, Field Hub	1-115-0171-999	$96.00
Cable, Serial Extension, Field Hub	1-115-0172-002	$18.00

Field Computers

Envizio Pro II®

Components, Envizio Pro™, Envizio Pro II®, and Envizio Pro XL™

Patch Antenna	1-063-0172-101	$82.00
MBA-6 Antenna	1-063-0172-651	$795.00
Antenna mounting plate	1-063-0172-971	$16.00
Double socket RAM length D, 1.5" ball	1-103-0001-031	$37.00
Clamp RAM rail, 1.5" ball	1-103-0001-033	$40.00
Mounting Bracket, Envizio Pro II to Slingshot Field Hub	1-107-0172-165	$37.00
Antenna Cable	1-115-0171-787	$88.00
Cable, 10' Cab to Chassis Extension	1-115-0171-929	$145.00
Kit, Mounting, RAM Vesa Plate	1-117-0171-132	$100.00
MBA-3 Antenna Kit	1-117-0171-141	$580.00
Envizio Pro Boom Speed / Single Product Node Mounting Bracket	1-117-0171-182	$114.00
4 GB USB Flash Drive	1-524-0002-065	$30.00

Software, Envizio Pro™, Envizio Pro II®, and Envizio Pro XL™

Envizio Pro (II/XL) Single Product Variable Rate	1-077-0180-031	$750.00
Envizio Pro (II/XL) Seed Population Rate Control	1-077-0180-058	$750.00
Envizio Pro (II/XL) Multi-Hybrid Control	1-077-0180-110	$750.00
Envizio Pro (II) Product Control (Channels 3-4)	1-077-0180-066	$500.00
Envizio Pro (II/XL) Multi-Product VRA	1-077-0180-067	$1,000.00

Field Computers

Envizio Pro II®

GPS Software, SBAS/RTK Capable, Envizio Pro II®

Upgrade to GS Corrections and/or RTK

Note: Customers with no existing OmniSTAR unlocks wanting to upgrade to GS Coreections and/or RTK.

From Base Level

Note: Receiver and/or field computer comes capable of SBAS, which includes WAAS, EGNOS, MSAS

GLONASS (only adds GLONASS to Base Level)	1-077-0180-083	$500.00
GS (includes GLONASS)	1-077-0180-116	$2,000.00
RTK (includes GLONASS)	1-077-0180-117	$4,000.00

From SBAS + GLONASS

GS (includes GLONASS)	1-077-0180-119	$1,500.00
RTK (includes GLONASS)	1-077-0180-118	$3,500.00

From SBAS + GS + GLONASS

RTK (includes GLONASS)	1-077-0180-120	$2,000.00

OmniSTAR to GS Unlocks (No Charge Unlocks)

Note: Customers with existing OmniSTAR unlocks wanting to upgrade to GS Corrections will need to unlock the GS capability in their GPS receiver or Raven field computer. There will be NO COST to do this, however the normal order and authorization process will need to be followed with the below part numbers.

SBAS + OmniSTAR to SBAS + GS + GLONASS	1-077-0180-124	$0.00
SBAS + OmniSTAR + GLONASS to SBAS + GS + GLONASS	1-077-0180-125	$0.00
SBAS + OmniSTAR + RTK to SBAS + GS + GLONASS	1-077-0180-126	$0.00
SBAS + OmniSTAR + RTK + GLONASS to SBAS + GS + RTK + GLONASS	1-077-0180-127	$0.00

GPS Receiver - Compatibility Requirements

Description	REV	Software	GPS Engine Software
Envizio Pro II (p/n 063-0173-517)	All	3.7.1.13 or higher	OEM060400RNOOO

NOTE: If you have an older version receiver and/or field computer that is not compatible with the requirements listed above and you are seeking an unlock for OmniSTAR corrections, please utilize Raven SmartQuote to obtain the authorization code.

Field Computers

Envizio Pro II®

Manuals, Envizio Pro™, Envizio Pro II®, and Envizio Pro XL™

Install & Operating Manual	1-016-0171-148	$20.00
Quick Reference Guide	1-016-0171-149	$16.00
Planter Control Manual	1-016-0171-405	$23.00
Planter Control Quick Reference Guide	1-016-0171-406	$15.00

Other Service Parts and Components

Interface Cables, Viper Pro™ and Envizio Pro II®

***AGCO machine equipped w/ 5V flowmeter. Boom/speed and Raven product node 063-0173-304 required.**
****AGCO machine equipped w/ 12V flowmeter. Boom/speed and AGCO product node 063-0173-343 required.**

Cable, Viper Pro/Envizio Pro to Viper cabling	1-115-0171-742	$184.00
Cable, Viper Pro/Envizio Pro to 4000/5000 cabling	1-115-0171-823	$272.00
Cable, Adapter, SCS 4000/5000 to Viper Pro/Envizio Pro cabling	1-115-0171-774	$118.00
Cable, 2' Viper Pro/Envzio Pro to 460/660/661 cabling*	1-115-0171-763	$980.00
Cable, 2' Viper Pro/Envzio Pro to 661 cabling**	1-115-0171-764	$980.00
Cable, 2' Viper Pro/Envizio Pro to 440/450 cabling (nodes needed)	1-115-0171-767	$980.00
Cable, 2' Viper Pro/Envizio Pro to 4400/4600 cabling (nodes needed)	1-115-0171-766	$1,105.00
Cable, Viper Pro to Case 4260 A-post cabling	1-115-0171-765	$945.00
Cable, Com 3 to Lightbar (with LB power)	1-115-0171-773	$148.00

Field Computers

Raven ISO VT

Kits, Raven ISO VT

***To do product control with the Raven ISO VT, you must also order the 117-6020-001 kit.**

Kit, Raven ISO VT (includes cable)*	1-117-6010-001	$1,835.00

Cables

Cable, Raven VT Can/PWR/ISO bulkhead	1-115-7300-023	$202.00
Cable, Adapter Raven ISO/PWR w/IBBC connector	1-115-7300-021	$665.00

Compoments

Kit, 6 section ISOBus Switchbox	1-117-6020-001	$510.00
Kit, Raven ISO VT Mounting	1-117-0171-132	$100.00

Slingshot®

Slingshot®

Getting Started with Slingshot®

Slingshot Field Hubs and Base Stations can be managed online with your Slingshot web account. Go to www.ravenslingshot.com to log in. From your Slingshot web account, you can:

1. Activate Field Hubs
2. Activate Base Stations
3. Monitor your Base Station Network
4. Monitor and Manage Field Hubs

If you do not have a Slingshot account, you can request one by visiting www.ravenslingshot.com.

Purchasing a Slingshot RTK Base Station:

1. Select a Slingshot RTK Base Station
2. Select Backup Power Supply
3. You do not need to order a WMS License at the time you order a Base Station. The WMS License will be purchased through your Slingshot account at the time you activate your Base Station.
4. Refer to your Slingshot University* training materials for installation directions, or contact your local Raven "Account Manager."

Purchasing a Slingshot Field Hub:

1. Select a Slingshot Field Hub
    a. "Slingshot Field Hub Kits" come with a Field Hub and all wiring, antennae, and cables required for installation.
    b. "Slingshot Field Hub Installation Kits" come with no Field Hub, but all wiring, antennae, and cables required for installations in additional vehicles.
    c. "Slingshot Field Hub Only Kits" come with only a Field Hub and power cable.
2. Remember to activate your Slingshot Field Hub prior to release to the customer.
3. You do not need to purchase Correction Unlocks or other subscriptions for your Field Hub at the time you order a Field Hub. These are automatically ordered through your Slingshot account when you activate the Field Hub.

What is WMS?

Raven's Wireless Management Services (WMS) is our framework to remain connected to each Slingshot product deployed. This connection allows our Network Operations Center (NOC) to troubleshoot and maintain connected devices. A WMS License is required for access to these services and supporting infrastructure.

Slingshot®

RTK Base Station Only

Note: Does not include antenna and cabling

Slingshot Base Station 2.0 Only (Verizon) (US Only)	1-117-0171-594	$7,800.00
Slingshot Base Station 2.0 Only (HSPA)	1-117-0171-593	$7,800.00

RTK Base Station Kits and Backup Power Supplies

Slingshot Base Station 2.0 Kit (Verizon) (US Only)	1-117-0171-584	$9,995.00
Slingshot Base Station 2.0 Kit (HSPA)	1-117-0171-585	$9,995.00
Backup Power Supply (110V AC)	1-525-0001-056	$700.00
Backup Power Supply (220V AC)	1-525-0001-057	$700.00

WMS Annual Licenses

WMS 1.0 License for 1st Generation Slingshot Base Station	1-077-7000-030	$2,400.00
WMS 2.0 License for Slingshot Base Station 2.0	1-077-7000-029	$1,500.00

Base Station Antenna & Cables

Slingshot Base Station Antenna	1-063-0173-192	$1,550.00
Antenna Cable, 150'	1-115-0171-896	$625.00

Slingshot Field Hub Kits

Note: Customers ordering both Viper 4 and Slingshot must also order cable part number 1-115-0172-090 (Cable, Viper 4 Ethernet)

Kit, Field Hub Wi-Fi (Verizon CDMA) (US Only)	1-117-0171-514	$2,050.00
Kit, Field Hub Wi-Fi HSPA	1-117-0171-517	$2,050.00
Kit, Field Hub (Verizon CDMA) (US Only)	1-117-0171-304	$1,895.00
Kit, Field Hub (HSPA)	1-117-0171-357	$1,895.00
Kit, Fleet View Field Hub (HSPA)	1-117-0171-430	$1,195.00
Kit, Fleet View Field Hub (Verizon CDMA) (US Only)	1-117-0171-431	$1,195.00

Slingshot Field Hub Installation Kit

Kit, Field Hub Installation w/ Standard Cellular Antenna (x2)	1-117-0171-356	$515.00

Slingshot Field Hub Only

Field Hub Only (Verizon CDMA) (US Only)	1-063-0173-173	$1,560.00
Field Hub Only (HSPA)	1-063-0173-174	$1,560.00
Field Hub Only Wi-Fi (Version CDMA) (US Only)	1-063-0173-554	$1,750.00
Field Hub Only Wi-Fi (HSPA)	1-063-0173-561	$1,750.00

Subscriptions & Activations

Slingshot Correction Unlock	1-077-7000-028	$750.00

Interface Cables

Note: No additional interface cable is required when using the 115-0172-001 cable for Envizio Pro II.

Field Hub to Raven Phoenix 300 Interface Cable	1-115-0171-890	$79.00
Field Hub to Trimble EZ-Guide 500 Interface Cable	1-115-0171-910	$135.00
Field Hub to Autofarm Paradyme Interface Cable	1-115-0171-911	$237.00
Field Hub to Trimble AgGPS 262/AG-372 Interface Cable	1-115-0171-935	$243.00
Field Hub to Topcon Interface Cable	1-115-0171-997	$103.00
Field Hub to Trimble AgGPS FmX 1000 Interface Cable	1-117-0171-417	$132.00
Field Hub to Trimble CFX-750 Interface Cable	1-117-0171-416	$132.00
Field Hub to Outback A320 Interface Cable	1-115-0172-102	$59.00

Slingshot®

Replacement Parts

Magnetic NMO Cellular Antenna Mounting Plate	1-063-0172-971	$16.00
Antenna Base Magnetic NMO 20' w/ SMA	1-063-0173-172	$225.00
Field Hub GPS Patch Antenna	1-063-0173-179	$64.00
Backup Power Supply (110V AC)	1-525-0001-056	$700.00
Backup Power Supply (220V AC)	1-525-0001-057	$700.00
Kit, Field Hub Desktop Accessory	1-117-0171-350	$98.00
Standard Cellular Antenna	1-121-0000-031	$33.00
Low Profile Cellular Antenna	1-121-0000-032	$80.00
Ethernet Cable, 5'	1-420-2002-038	$12.00
Field Hub Power Cable	1-420-2002-043	$50.00
Field Hub/P300 Mounting Bracket	1-117-0171-427	$54.00
Field Hub/P300 Mounting Bracket Clamps	1-117-0171-428	$54.00
Field Hub/Envizio Pro II Mounting Bracket	1-107-0172-165	$37.00
Fleetview Field Hub Combo Antenna (Quad Band Cellular + GPS)	1-063-0173-361	$155.00

Guidance & Steering

Cruizer II™

Kits, Cruizer II™

Note: Different discounts apply

Kit, Cruizer II w/ Patch Antenna	1-117-0171-247	$1,695.00
Kit, Cruizer II w/ Helix Antenna	1-117-0171-249	$1,895.00

Kits, Cruizer II™, Weather Resistant

Note: Different discounts apply

Kit, Cruizer II, Weather Resistant, Patch Antenna	1-117-0171-250	$1,845.00
Kit, Cruizer II, Weather Resistant, Helix Antenna	1-117-0171-245	$2,045.00

Kits, Cruizer II™/Weather Resistant RTK

Note: Different discounts apply

Kit, Cruizer II RTK w/ MBA-6 Antenna	1-117-0171-418	$4,995.00
Kit, Cruizer II, Weather Resistant, RTK w/MBA-6	1-117-0171-460	$5,470.00

Cables & Components, Cruizer II™

Works with Cruizer™

Patch Antenna	1-063-0172-101	$82.00
Helix (MBA-3) Antenna	1-063-0172-480	$590.00
Mount, Vacuum RAM w/ Ball	1-103-0159-011	$32.00
Antenna Cable, 75'	1-115-0171-470	$165.00
Antenna Cable, 50'	1-115-0171-471	$129.00
Cable, 20' TNC(M) to BNC(M) (Helix to Cruizer)	1-115-0171-787	$88.00
Helix (MBA-3) Antenna Kit	1-117-0171-141	$580.00
Adapter Cable, TNC to BNC	1-407-4001-005	$12.00
Clamp RAM rail, 1" ball	1-103-0001-032	$15.00

GEN I

***Works with Cruizer™**

Cable, Port Exp Cruizer II (Port Expander Only)*	1-115-0171-791	$92.00
Cable, Adapt Boom Sense Cruizer II (Boom Sense Only)*	1-115-0171-792	$30.00
Cable, Port Exp Cruizer II w/ Speed Output*	1-115-0171-793	$135.00
Cable, Interface Cruizer II (Tilt sensor and Boom Sense, SmarTrax)*	1-115-0171-794	$129.00
Cable, Interface Cruizer II w/ Speed (SmartBoom)*	1-115-0171-835	$129.00
Cable, Port Expander Cruizer II w/ Speed (SmartBoom)*	1-115-0171-862	$198.00
Cable, Adapter CAN Cruizer II	1-115-0171-886	$66.00
Cable, Cruizer II to SCS 4XX-6XX w/speed	1-115-0172-054	$138.00
Power Cable, 12V*	1-420-1011-008	$21.00
Kit, Tilt w/ Cruizer Cable*	1-117-0171-180	$605.00

Guidance & Steering

Cruizer II™

Cables & Components, Cruizer II™

GEN II

Cable, 3', WR Cruizer II, power adapter to power cable	1-115-0171-876	$83.00
Cable, Cruizer II (Chassis Cable Interface)	1-115-4001-066	$181.00
Cable, Cruizer II RTK (Chassis Cable Interface)	1-115-4001-102	$510.00
Cable, Cruizer II to SmarTrax 3D Node (Case IH installations)	1-115-4001-088	$240.00
Cable, Cruizer II RTK to SmarTrax 3D Node (Case IH installations)	1-115-4001-099	$530.00
Cable, Chassis, Steering Only Systems	1-115-4001-085	$232.00
Cable, Adapter, Cruizer II, Chassis Cable Interface, External GPS	1-115-4001-095	$109.00
Cable, Gen II WR Cruizer II w/RTK	1-115-4001-123	$530.00
Cable, Chassis, Steering Only Systems 3' (Power in Cab)	1-115-4001-131	$209.00

Cables & Components, Cruizer II™, Weather Resistant

GEN I

Cable, Expander Port B/D and CAN, Cruizer II, WR	1-115-0171-870	$180.00
Cable, Expander Port A/C, Cruizer II, WR	1-115-0171-871	$225.00
Cable, 15' TNC(M) to TNC(M), Helix to Cruizer II, WR	1-115-0171-117	$75.00
Cable Adapter, WR Cruizer II, boom sense	1-115-0171-976	$99.00
Power Cable, WR Cruizer II	1-115-0171-872	$107.00
Cable, Port Expander, WR Cruizer II, with Speed Output, SmartBoom	1-115-0171-889	$203.00

GEN II

Console Cable, WR Cruizer II	1-115-4001-090	$373.00

Cruizer Care

CruizerCare Extended Warranty (Register on Backoffice)	(for US and Canada)	$250.00

Software, Cruizer II™

Note: Not all Cruizers are e-Diff capable.
***GPS serial number needed from GPS health screen at time of order.**

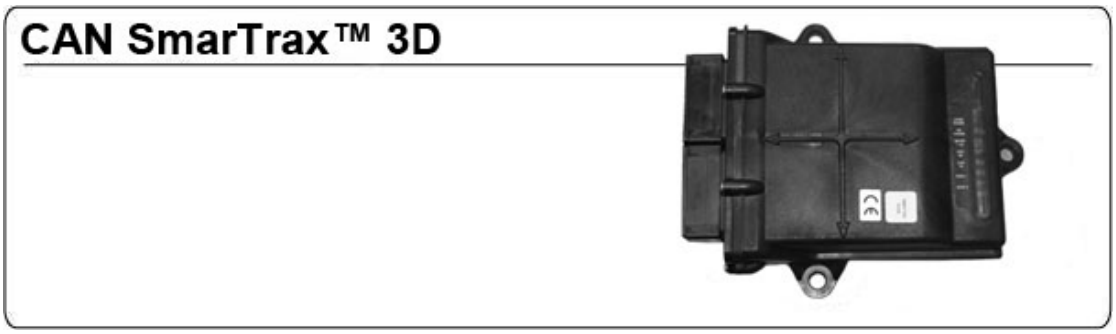
e-Dif Upgrade (Machine ID# begins w/ "H")*	1-077-0180-017	$610.00
e-Dif Upgrade (Machine ID# does not begin w/ "H")	1-077-0180-042	$635.00
Cruizer Load Cell Authorization	1-077-0180-057	$1,070.00
GLONASS upgrade (GPS SN starts with DHJ)	1-077-0180-061	$530.00

Manuals, Cruizer II™

Cruizer II Manual	1-016-0171-415	$9.40
Cruizer II Weather Resistant manual	1-016-0171-364	$9.40

Guidance & Steering

CAN SmarTrax™ 3D



CAN SmarTrax™ 3D

The CAN SmarTrax™ provides a more integrated and seamless installation. The yaw sensor has been integrated into the control node and all programming and operation can now be performed via the Viper Pro™, Envizio Pro II®, or Cruizer II™. The 3D upgrade provides compensation for roll, pitch and yaw to improve performance in rough and uneven terrain. When combined with a Phoenix 300™ receiver utilizing OmniStar HP correction, 2"-4" swath accuracy can be achieved up to 10 mph with 3D activated. CAN SmarTrax™ kits consist of three or four components:

- CAN SmarTrax™ node kit
- Machine-specific hydraulic installation kit
- Viper Pro™, Envizio Pro II®, or Cruizer II™
- DGPS receiver (Not required with Envizio Pro II® w/ GPS or Cruizer II™)

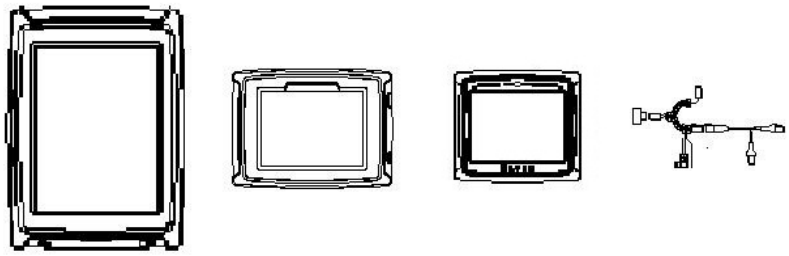
Steer-ready machines

CAN SmarTrax™ kits are available for several machines shipped with preinstalled steering components. CAN SmarTrax™ systems are offered with 3D activated as well. Please read descriptions carefully to ensure the proper kit is ordered.

Guidance & Steering

CAN SmarTrax™ 3D

How to order CAN SmarTrax™ 3D with GEN I Cabling



1. **Hydraulic Install Kit**
   - Machine-specific hydraulic install kit

2. **CAN SmarTrax™ 3D Kit**
   - CAN Steering Control with 3D for Viper Pro™/Envizio Pro II®
   - CAN Steering Control with 3D for Cruizer II™
   - CAN SmarTrax™ Node (063-0173-031) for systems with machine specific node cabling, denoted with a (*)

3. **Raven Guidance Kit**
   - Viper Pro™
   - Envizio Pro II®
   - Cruizer II™
   - Viper® 4

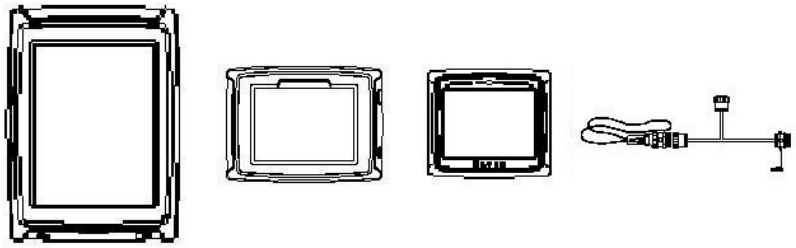
4. **Order a CANBUS power adapter and terminator kit (1-117-0159-923)**
   - *Note: Not needed if already present on the machine.*

5. **DGPS Receiver (Exclude if Envizio Pro II® with internal GPS or Cruizer™)**
   - Phoenix 200™ (WAAS) (sub-meter)
   - Phoenix 200™ (WAAS/e-Dif) (sub-meter)
   - Invicta 210 (WAAS/Coast Guard Beacon) (sub-meter)
   - Phoenix 300™ (OmniStar XP/HP) (decimeter)
   - Phoenix 300™ (WAAS/CDGPS/VBS) (sub-meter)
   - Phoenix 300™ (RTK) (sub-inch)

Guidance & Steering

CAN SmarTrax™ 3D

How to order CAN SmarTrax™ 3D with GEN II Cabling



1. **Machine Install Kit**
   - Machine-specific install kit
   - *For a Steer Ready Machine Kit, skip to step 3*

2. **CAN SmarTrax™ 3D Kit – GEN II**

3. **Raven Guidance Kit**
   - Viper Pro™
   - Envizio Pro II®
   - Cruizer II™
   - Viper® 4

4. **Console Cable**

5. **Chassis Power Cable/SmarTrax™ "Tee"**
   - 115-4001-085 (steering only) – **Tee included**
   - 115-4001-070
   - 115-4001-071 (6' Tee)

6. **DGPS Receiver (Exclude if Envizio Pro II® with internal GPS or Cruizer™)**
   - Phoenix 200™ (WAAS) (sub-meter)
   - Phoenix 200™ (WAAS/e-Dif) (sub-meter)
   - Invicta 210 (WAAS/Coast Guard Beacon) (sub-meter)
   - Phoenix 300™ (OmniStar XP/HP) (decimeter)
   - Phoenix 300™ (WAAS/CDGPS/VBS) (sub-meter)
   - Phoenix 300™ (RTK) (sub-inch)

Guidance & Steering

CAN SmarTrax™ 3D

Controller Kits, CAN SmarTrax™ 3D

GEN I

****Use with 117-4001-XXX steering kits.**

Controller Kit, CAN SmarTrax w/ 3D for Viper Pro/Envizio Pro (Use with 117-0295-XXX steering kits)	1-117-0197-009	$4,785.00
Controller Kit, CAN SmarTrax w/ 3D for Cruizer (Use with 117-0295-XXX steering kits)	1-117-0197-034	$4,785.00
Controller Kit, CAN SmarTrax w/3D for Cruizer II (Use with 117-0295-XXX steering kits)	1-117-0197-096	$4,785.00
Controller Kit, CAN SmarTrax w/3D for WR Cruizer II (Use with 117-0295-XXX steering kits)	1-117-0197-097	$4,885.00
Controller Kit, CAN SmarTrax w/3D for Viper Pro/Envizio Pro (Use with 117-4001-XXX steering kits)	1-117-0197-079	$4,785.00
Controller Kit, CAN SmarTrax w/3D for Cruizer (Use with 117-4001-XXX steering kits)	1-117-0197-081	$4,785.00
Controller Kit, CAN SmarTrax w/3D for WR Cruizer II (Use with 117-4001-XXX steering kits)	1-117-0197-099	$4,785.00
Controller Kit, CAN SmarTrax w/3D for Cruizer II (Use with 117-4001-XXX steering kits)	1-117-0197-100	$4,785.00

GEN II

Controller Kit, CAN SmarTrax 3D (Use with 117-0295-XXX kits)	1-117-5030-003	$4,430.00
Controller Kit, CAN SmarTrax 3D (Use with 117-4001-XXX kits)	1-117-5030-004	$4,430.00
Controller Kit, CAN SmarTrax 3D (Use with 117-503X-XXX kits)	1-117-5030-005	$4,430.00

Cables, CAN SmarTrax™ 3D

GEN II

Cable, Viper Pro/Envizio Pro systems	1-115-0172-001	$444.00
Cable, Cruizer II (Chassis Cable Interface)	1-115-4001-066	$181.00
Cable, 6" Tee, SmarTrax to Cab	1-115-4001-070	$159.00
Cable, 72" Tee, SmarTrax to Cab	1-115-4001-071	$238.00
Cable, Chassis, Steering Only Systems (includes SmarTrax tee)	1-115-4001-085	$232.00
Cable, Cruizer II Console, Case Steer Ready	1-115-4001-088	$240.00
Cable, Cruizer II Console, RTK, Case Steer Ready	1-115-4001-099	$530.00
Cable, Cruizer II Console, RTK, Steer Ready	1-115-4001-102	$510.00

Guidance & Steering

CAN SmarTrax™ 3D

Machine-Specific Steering Kits, CAN SmarTrax™ 3D

AGCO

Application Equipment

AGCO RoGator 854 (1998 & Newer)	1-117-0295-014	$2,445.00
AGCO RoGator 854 (1996 & Older), 664	1-117-0295-025	$2,445.00
AGCO Spra-Coupe 3000/4000	1-117-0295-032	$2,445.00
AGCO 1903 TerraGator	1-117-0295-037	$2,445.00
AGCO Spra-Coupe 220	1-117-0295-058	$2,445.00
AGCO RoGator 854 (1997 Model)	1-117-0295-080	$2,445.00
AGCO TerraGator 6103/8103/8104/8144/9103/9203/TG9300 2008 and older: 6203/8203/8204/8244	1-117-4001-011	$2,445.00
AGCO RoGator 1254	1-117-4001-015	$2,445.00
AGCO TerraGator1603/1803/1804	1-117-4001-028	$2,445.00
AGCO RoGator 64/74/84/94 Series (Excluding 664), SS	1-117-4001-031	$2,445.00
AGCO Spra-Coupe 7X5X, 7X60	1-117-4001-056	$2,445.00
AGCO Rogator 84/86 Series, SS	1-117-4001-084	$2,445.00
AGCO RoGator RG900/1100/1300 (Requires Steering Node 1-063-0173-228)	1-117-4001-090	$2,815.00
AGCO TerraGator 6303/8303/TG7300/TG8300/TG8400 2009 & newer: 6203/8203/8204/8244	1-117-4001-093	$2,445.00

Tractor

AGCO DT 160/180/200/225	1-117-0295-065	$2,445.00
AGCO Allis 9635/9655/9675/9695	1-117-0295-066	$2,445.00
Massey Ferguson 8450/8460/8470/8480 RTK (Requires Steering Node 1-063-0173-228)	1-117-5033-002	$3,595.00
AGCO DT180A/200A/220A/240A RTK (Requires Steering Node 1-063-0173-228)	1-117-5033-002	$3,595.00
Challenger MT635B/645B/655B/665B RTK (Requires Steering Node 1-063-0173-228)	1-117-5033-002	$3,595.00
Challenger MT565 RTK	1-117-5033-003	$3,540.00
Massey Ferguson 82X0 RTK	1-117-5033-003	$3,540.00
AGCO DT2XXB RTK	1-117-5033-004	$3,540.00
Challenger MT6X5C RTK	1-117-5033-004	$3,540.00
Massey Ferguson 86X0 RTK	1-117-5033-004	$3,540.00
AGCO DT2XXB Steer Ready RTK	1-117-5033-005	$5,775.00
Challenger MT6X5C Steer Ready RTK	1-117-5033-005	$5,775.00
Massey Ferguson 86X0 Steer Ready RTK	1-117-5033-005	$5,775.00
Massey Ferguson 64XX/74XX RTK (Requires Steering Node 1-063-0173-228)	1-117-5033-006	$3,595.00
AGCO RT1XXA/RT100/RT120/RT135/RT150 RTK (Requires Steering Node 1-063-0173-228)	1-117-5033-006	$3,595.00
Challenger MT5X5B RTK (Requires Steering Node 1-063-0173-228)	1-117-5033-006	$3,595.00
Valtra BH145/180/185i/205i RTK	1-117-5033-100	$3,540.00
Valtra BT150/170/190/210 RTK	1-117-5033-101	$3,540.00
Valtra T HiTech RTK	1-117-5033-102	$3,540.00

Apache

Apache AS 700 Series, 859, AS Series 1X10 (Open Center)	1-117-4001-044	$2,395.00
Apache AS 20 Series 2011 and older (MY2012+ purchased through ET) (Requires Steering Node 1-063-0173-228)	1-117-4001-104	$2,815.00

Guidance & Steering

CAN SmarTrax™ 3D

Machine-Specific Steering Kits, CAN SmarTrax™ 3D

Buhler

Application Equipment

Buhler Versatile SX 275 Sprayer*	1-117-4001-100	$2,815.00

Tractor

Buhler Versatile 4WD 305-575 RTK	1-117-5031-001	$3,540.00
Buhler Versatile Row Crop 250/280/305, MFWD RTK Row Crop 2145/2160/2180/2210, MFWD RTK	1-117-5031-002	$3,540.00
Buhler Versatile 4WD 350-550 (MY 2012) Steer Ready RTK	1-117-5031-003	$5,775.00
Buhler Versatile 4WD 350-550 (MY 2012) RTK (Requires Steering Node 1-063-0173-228)	1-117-5031-006	$3,595.00
Buhler Versatile 2360/2375/2425	1-117-5031-007	$3,540.00

Guidance & Steering

CAN SmarTrax™ 3D

Machine-Specific Steering Kits, CAN SmarTrax™ 3D

CaseIH

Application Equipment

CaseIH FLX 4300/4375 (1999 & Newer)	1-117-0295-018	$2,445.00
CaseIH 4300 Floater (1999 & Newer)	1-117-0295-018	$2,445.00
CaseIH SPX 3200 (Open Center) (pre 2002)	1-117-0295-030	$2,445.00
CaseIH SPX 3200 (Closed Center) (2002+)	1-117-0295-034	$2,445.00
CaseIH 4300 Floater (1997 & Older)	1-117-0295-072	$2,445.00
CaseIH Titan, 3030/3530 (MY2012) (Requires Steering Node 1-063-0173-228)	1-117-4001-116	$2,815.00
CaseIH Titan 4030/4530 (MY2012) (Requires Steering Node 1-063-0173-228)	1-117-4001-117	$2,815.00
CaseIH FLX 4010/4510/4020/4520 (Requires Steering Node 1-063-0173-228)	1-117-4001-023	$2,815.00
CaseIH SPX 3150/3185, Tyler Patriot, SPX 2130	1-117-4001-027	$2,445.00
CaseIH FLX 3010/3510/3020/3520 (Requires Steering Node 1-063-0173-228)	1-117-4001-045	$2,815.00
CaseIH SPX 3310	1-117-4001-078	$2,445.00
CaseIH Titan, 3030/3530 (MY2013) (Requires Steering Node 1-063-0173-228)	1-117-4001-126	$2,715.00
CaseIH Titan 4030/4530 (MY2013) (Requires Steering Node 1-063-0173-228)	1-117-4001-127	$2,715.00
CaseIH Titan 3030/3530/4030/4530 (MY2012) Steer Ready (Requires Steering Node 1-063-0173-228)	1-117-5032-011	$5,775.00
CaseIH Titan 3030/3530/4030/4530 (MY2012) Steer Ready w/ P200	1-117-5032-012	$7,585.00
CaseIH 3230/3320/3330 Steer Ready	1-117-5032-013	$5,775.00
CaseIH 3230/3320/3330 Steer Ready w/ P200	1-117-5032-014	$7,585.00
CaseIH 4420 Steer Ready, 2009 and Newer	1-117-5032-015	$5,775.00
CaseIH 4420 Steer Ready w/ P200, 2009 and Newer	1-117-5032-016	$7,740.00
CaseIH SPX 4260/4410/4420, MY 2099-2011 (Requires Steering Node 1-063-0173-228)	1-117-5032-017	$3,595.00
CaseIH SPX 4410/4420, 2008 and Older, 4260 (S/N JFG0003537 & Newer) (Requires Steering Node 1-063-0173-228)	1-117-5032-018	$3,595.00
CaseIH Patriot 4430 (MY2013) (Requires Steering Node 1-063-0173-228)	1-117-5032-025	$3,595.00
CaseIH Patriot 4430 (MY2013) Steer Ready	1-117-5032-026	$5,775.00
CaseIH Patriot 4430 (MY2013) Steer Ready w/ P200	1-117-5032-027	$7,585.00
CaseIH Titan 3030/3530/4030/4530 (MY2013) Steer Ready	1-117-5032-028	$5,775.00
CaseIH Titan 3030/3530/4030/4530 (MY2013) Steer Ready w/ P200	1-117-5032-029	$7,585.00
CaseIH SPX 3230/3320/3330 (Requires Steering Node 1-063-0173-228)	1-117-5032-081	$3,595.00
CaseIH Patriot 4430 (MY2012) (Requires Steering Node 1-063-0173-228)	1-117-5032-082	$3,595.00
CaseIH Patriot 4430 (MY2012) Steer Ready	1-117-5032-083	$5,775.00
CaseIH Patriot 4430 (MY2012) Steer Ready w/ P200	1-117-5032-084	$7,585.00
CaseIH Patriot 250 Steer Ready	1-117-5032-085	$5,775.00
CaseIH Patriot 250/2240 (Requires Steering Node 1-063-0173-228)	1-117-5032-086	$3,595.00

Guidance & Steering

CAN SmarTrax™ 3D

Machine-Specific Steering Kits, CAN SmarTrax™ 3D

CaseIH

Combine

CaseIH 2100-2300 Series	1-117-0295-068	$2,445.00
CaseIH AFX 8010/7010	1-117-0295-042	$2,445.00
CaseIH 5/6/7088 Combine RTK	1-117-5032-021	$3,540.00
CaseIH 2x44/2x66/2x77/2x88 RTK	1-117-5032-023	$3,540.00
CaseIH x010/x120/x230 Steer Ready RTK	1-117-5032-024	$5,775.00

Tractor

CaseIH MX 180/200/220/240/270	1-117-0295-006	$2,445.00
CaseIH MX 100/110/120/135/150/170	1-117-0295-059	$2,445.00
CaseIH 89X0 and 72X0 Series	1-117-0295-064	$2,445.00
CaseIH MXM 120/130/140/155/175/190	1-117-0295-074	$2,445.00
CaseIH MX/Magnum Steer Ready RTK	1-117-5032-001	$5,775.00
CaseIH Steiger 280/330/335/380/385/430/435/480/485/530/535 Steer Ready RTK	1-117-5032-002	$5,775.00
CaseIH Steiger 350/400/450/500/550/600 Steer Ready RTK	1-117-5032-002	$5,775.00
CaseIH MX 210/215/230/245/255/275/285/305 RTK	1-117-5032-003	$3,540.00
CaseIH-Stieger 335/385/435/485/535 RTK	1-117-5032-004	$3,540.00
CaseIH STX 280/330/380/430/480/530 RTK	1-117-5032-004	$3,540.00
CaseIH Puma RTK	1-117-5032-005	$3,540.00
CaseIH-Steiger 91X0, 92X0, 93X0 Series, Quadtrac	1-117-5032-006	$3,540.00
CaseIH 91XX/92XX/93XX RTK	1-117-5032-006	$3,540.00
CaseIH Puma Steer Ready RTK	1-117-5032-007	$5,775.00
CaseIH Puma 115-160 2WD RTK	1-117-5032-008	$3,540.00
CaseIH Puma 115-160 MFWD RTK	1-117-5032-009	$3,540.00
CaseIH MX/Magnum Class V Axle RTK	1-117-5032-010	$3,540.00
CaseIH STX/Quadtrac 275/325/375/425/450/500	1-117-5032-020	$3,540.00

CAT

CAT B, C, D Series 65, 75, 85, 95	1-117-0295-070	$2,445.00
Cat Challenger 35, 45, 55	1-117-0295-077	$2,445.00
CAT E Series 65, 75, 85, 95	1-117-0295-096	$2,445.00
CAT MT 700, 800 C series RTK	1-117-5033-001	$5,775.00

Ford New Holland

Ford New Holland 928X/948X w/out High Flow (Open Center)	1-117-0295-046	$2,445.00

GVM

GVM Prowler (2007 & Older, non 120' boom)	1-117-0295-020	$2,445.00
GVM Predator (2006 & Older), 5186 all years	1-117-0295-035	$2,445.00
GVM Predator (Spray-Air)	1-117-0295-053	$2,445.00
GVM Prowler (2008 and Newer & all 120' booms)	1-117-0295-085	$2,445.00
GVM Predator 8275 (2007 & Newer)	1-117-0295-086	$2,445.00
GVM Prowler MY 2011	1-117-4001-105	$2,445.00

Guidance & Steering

CAN SmarTrax™ 3D

Machine-Specific Steering Kits, CAN SmarTrax™ 3D

Hagie

Hagie 2100/2101	1-117-4001-057	$2,445.00
Hagie STS 2007-2011 (Requires Steering Node 1-063-0173-228)	1-117-5030-011	$3,595.00

John Deere

Application Equipment

John Deere 4700, 4710	1-117-0295-019	$2,445.00
John Deere 4720	1-117-0295-062	$2,445.00

Combine

John Deere 9600	1-117-0295-047	$2,445.00
John Deere STS 9X50/9X60/9x70 RTK	1-117-5034-017	$3,465.00
John Deere 9x50/9x60/9x70 (MY 2009 & Older) Steer Ready RTK	1-117-5034-014	$5,895.00
John Deere 9x70 Steer Ready (MY 2010+) RTK	1-117-5034-015	$5,895.00

Tractor

John Deere 8X60/8X70 RTK (Requires Steering Node 1-063-0173-228)	1-117-5034-020	$3,540.00
John Deere 4X40/50/55/60 (Requires Steering Node 1-063-0173-228)	1-117-5034-021	$3,540.00
John Deere 7220/7820/7920/7630/7730/7830/7930 Steer Ready RTK	1-117-5034-001	$5,775.00
John Deere 8X00/8X10/8X20/8X30 Steer Ready RTK	1-117-5034-002	$5,775.00
John Deere 9X00/9X20/9X30 Steer Ready RTK	1-117-5034-003	$5,775.00
John Deere 7X00/7X10 MFWD RTK	1-117-5034-004	$3,540.00
John Deere 7720/7820/7920/7630/7730/7830/7930 RTK	1-117-5034-005	$3,540.00
John Deere 8X00, 8X10 RTK	1-117-5034-006	$3,540.00
John Deere 8X20 RTK	1-117-5034-007	$3,540.00
John Deere 7X00/7X10 RTK 2WD	1-117-5034-008	$3,540.00
John Deere 7715/7815/7185J/7205J/7225J (S. America)	1-117-5034-009	$3,540.00
John Deere 7R/8R/9R ISO Steer Ready (Requires activation from John Deere) RTK	1-117-5034-010	$5,775.00
John Deere 7220/7330/7420/7425/7525 RTK 7130/7230/7330/7430/7530 RTK	1-117-5034-011	$3,540.00
John Deere 904/1204 (Asia) RTK	1-117-5034-012	$3,540.00
John Deere 8225R/8245R/8270R/8295R/8320R/8345R Steer Ready RTK (MY 2009-2010) RTK	1-117-5034-013	$5,775.00
John Deere 9x00/9x20 RTK	1-117-5034-016	$3,540.00
John Deere 7220/7320/7420/7520, Steer Ready RTK 7130/7230/7330/7430/7530, Steer Ready RTK	1-117-5034-019	$5,775.00
John Deere 6x20/6x30 Steer Ready RTK	1-117-5034-019	$5,775.00
John Deere 8x70/8x60 Steer Ready	1-117-5034-020	$3,540.00

Lexion

Lexion 500 Series Combine	1-117-0295-095	$2,445.00

Macdon

Macdon M150, 155, 200, 205 Steer Ready (Requires Macdon Steer Ready Platform Kit)	1-117-5030-009	$5,775.00

Guidance & Steering

CAN SmarTrax™ 3D

Machine-Specific Steering Kits, CAN SmarTrax™ 3D

Mertz

Mertz Silverwheels 3004/3304	1-117-4001-040	$2,445.00
Mertz/Tyler 3300	1-117-0295-041	$2,445.00

Miller

Nitro 200,2200,2200HT,2275,2275HT,3200,3200HT,3275,3275HT,N1	1-117-0295-026	$2,445.00
Nitro N2/N2XP	1-117-0295-069	$2,445.00
Miller MD, Condor (Requires Steering Node 1-063-0173-228)	1-117-0295-083	$2,815.00
Nitro N4 (4000 Series) (Requires Steering Node 1-063-0173-228)	1-117-4001-087	$2,815.00
Miller, Condor, G-Series (2009) (Requires Steering Node 1-063-0173-228)	1-117-4001-103	$2,815.00

McCormick

MTX, XTX, TTX, MFWD	1-117-5030-017	$3,535.00

New Holland

Application Equipment

New Holland Guardian Sprayer, SP240F to SP365F (Requires Steering Node 1-063-0173-228)	1-117-4001-087	$2,815.00
New Holland Guardian Sprayer, SP240R and SP275R (Requires Steering Node 1-063-0173-228)	1-117-4001-103	$2,815.00
New Holland SP 3500 Steer Ready (S. America) RTK	1-117-5032-085	$5,775.00
New Holland SP 3500 Steer Ready (S. America) RTK (Requires Steering Node 1-063-0173-228)	1-117-5032-086	$3,595.00

Combine

New Holland CX8x0/CX80x0 Steer Ready RTK	1-117-5032-024	$5,775.00
New Holland CR9x0/CR90xx Steer Ready RTK	1-117-5032-024	$5,775.00

Tractor

New Holland 9680,9682,9684,9880,9882,9884 w/ high flow (closed center)	1-117-0295-076	$2,395.00
New Holland T80X0 Steer Ready RTK	1-117-5032-001	$5,775.00
New Holland TJ 280/330/380/430/480/530 Steer Ready RTK	1-117-5032-002	$5,775.00
New Holland T9020/9030/9040/9050/9060 Steer Ready RTK	1-117-5032-002	$5,775.00
New Holland T9.390/450/505/560/615/670 RTK	1-117-5032-002	$5,775.00
New Holland TG210/215/230/245/255/275/285/305 RTK	1-117-5032-003	$3,540.00
New Holland TJ280/TJ380/TJ430/TJ480/TJ530/T90X0 (closed center) RTK	1-117-5032-004	$3,540.00
New Holland T70X0 w/out supersteer RTK	1-117-5032-005	$3,540.00
New Holland T70X0/T7.XXX Steer Ready RTK	1-117-5032-007	$5,775.00
New Holland T60X0 2WD RTK	1-117-5032-008	$3,540.00
New Holland T60X0 MFWD RTK	1-117-5032-009	$3,540.00
New Holland TG/T80X0 Class V Axle RTK	1-117-5032-010	$3,540.00

RBR

Vector/Vortex 300 2010-11 (Requires Steering Node 1-063-0173-228)	1-117-4001-101	$2,815.00
Vector LS/Venturi (Requires Steering Node 1-063-0173-228)	1-117-5030-010	$8,160.00

Guidance & Steering

CAN SmarTrax™ 3D

Machine-Specific Steering Kits, CAN SmarTrax™ 3D

Servspray

Servspray 3000/4000 Yaw Sensor	1-117-0295-092	$2,445.00

Upgrades, CAN SmarTrax™ 3D

Kit, SmarTrax node upgrade, Viper Pro/Envizio Pro	1-117-0197-049	$3,440.00
Kit, SmarTrax 3D node upgrade, Viper Pro/Envizio Pro	1-117-0197-050	$4,560.00
Authorization Code, SmarTrax 3D	1-077-0180-056	$1,445.00

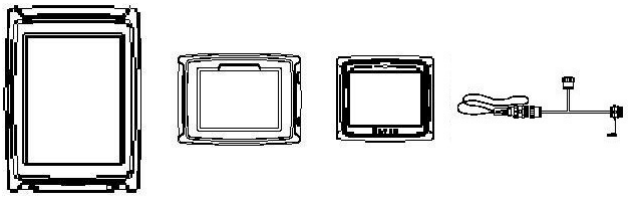
Replacement Parts, CAN SmarTrax™ 3D

Case IH 4420 and STX/Steiger (Node Mounting Kit)	1-117-0197-044	$49.00
CaseIH MX, SPX 3320, Magnum (Node Mounting Kit)	1-117-0197-078	$46.00
Cable, CAN SmarTrax, Terrain Comp, Closed Center/Load Sense	1-115-4001-002	$390.00
Cable, CAN SmarTrax, Terrain Comp, Pressure Comp.	1-115-4001-003	$403.00
Cable, CAN SmarTrax, Terrain Comp to Stand Alone System	1-115-4001-034	$500.00
Cable, Node, Terrain Comp - Hydraulics	1-115-4001-011	$390.00
Cable, Node, Terrain Comp, w/ Cruizer II - Hydraulics	1-115-4001-013	$403.00
Micro. Heavy Duty. 15-100 Bar. Adjustable w/ T-fittings - 90 deg	1-422-0000-074	$341.00
Micro. Heavy Duty. 6-50 Bar. Adjustable w/ T-fittings - 90 deg	1-422-0000-075	$327.00
Pressure Transducer	1-422-0000-086	$184.00
Hydraulic Override Flow Switch	1-334-0003-024	$600.00
Hydraulic Override Flow Switch w/ Transducer	1-334-0003-085	$412.00
Foot Switch, SmarTrax Enable	1-063-0172-470	$131.00
Open & Closed Center Hyd Systems (2 solenoid connection) SPS	1-115-0171-466	$298.00
Pressure Compensated Systems (2 solenoid connections) for Yaw Sensor	1-115-0171-777	$310.00
Open & Closed Center Hyd Systems (2 solenoid connection) for Yaw Sensor	1-115-0171-775	$310.00
Cable, Rotary Sensor	1-063-0181-014	$104.00
Cable, 10' Extension, Steering Position Sensor	1-115-0171-448	$95.00
Cable, 20' Extension. Steering Position Sensor	1-115-0171-501	$97.00
Node, CAN SmarTrax 3D	1-063-0173-228	$4,465.00

Guidance & Steering

SmarTrax™ MD

SmarTrax™ MD Kits (Steering Wheel Actuated)
SmarTrax™ MD is a steering system that uses a mechanical drive unit (MDU) attached to the steering wheel. This greatly simplifies the installation of an assisted steering system. It also allows the owner to easily move the steering system between different machines. The kits contain the control node, MDU, mounting hardware and cables necessary to connect to the Viper Pro™, Envizio Pro™, or Cruizer™. Additional CAN cabling and terminators may be necessary depending on system configuration.



1. **SmarTrax™ MD Kit**
   - GEN II SmarTrax™ MD Kit with 3D for Envizio Pro II ®/ Cruizer II™ (117-5030-020)
2. **Vehicle Install Kit**
3. **Raven Guidance kit**
   - Viper Pro™
   - Envizio Pro II®
   - Cruizer II™
4. **Console Cable**
5. **Chassis Power Cable/SmarTrax™ "Tee"**
   - 115-4001-085 (steering only)
   - 115-4001-070
   - 115-4001-071 (6' Tee)
6. **DGPS Receiver (Exclude if Envizio Pro™ with internal GPS or Cruizer™)**
   - Phoenix 200™ WAAS (sub-meter)
   - Phoenix 200™ WAAS/e-Dif (sub-meter)
   - Invicta 210 WAAS/Coast Guard Beacon (sub-meter)
   - Phoenix 300™ OmniStar XP/HP (decimeter)
   - Phoenix 300™ (WAAS/CDGPS/VBS) (sub-meter)

Guidance & Steering

SmarTrax™ MD

Kits, SmarTrax™ MD

Note: Different discounts apply for all GEN II and Install Kits.

GEN II

SmarTrax MD Kit	1-117-5030-020	$3,995.00
SmarTrax MD Upgrade Kit from SmartSteer (1-117-5030-001)	1-117-5030-023	$3,195.00

Install Kits

Generic

SmarTrax MD Generic Install Kit 7/8" 36 Tooth	1-117-5030-021	$500.00
SmarTrax MD Generic Install Kit 5/8" 36 Tooth	1-117-5030-022	$500.00

AGCO

AGCO DT-B	1-117-5030-035	$500.00
Challenger MT6x5C/MT5x5D/MT6x5D	1-117-5030-035	$500.00
Massey Ferguson 76x0/86x0	1-117-5030-035	$500.00
RoGator xx4/xxx4	1-117-5030-040	$500.00
TerraGator x1xx/x2xx	1-117-5030-040	$500.00

CaseIH

CaseIH 72x0/89x0	1-117-5030-031	$500.00
CaseIH MX/Magnum 180-335	1-117-5030-039	$500.00
CaseIH AFX Combine x010/x120/x230	1-117-5030-051	$500.00
CaseIH 2xxx/x088 Combine	1-117-5030-052	$500.00
CaseIH Steiger/STX 275-600	1-117-5030-061	$500.00
Case IH Puma/Maxxum	1-117-5030-032	$500.00
Case IH 91x0/92x0/93x0	1-117-5030-062	$500.00

Fendt

Fendt 700/800/900 Vario	1-117-5030-043	$500.00

Ford

Ford 8x70	1-117-5030-041	$500.00
Ford 846/876/946/976	1-117-5030-062	$500.00

John Deere

John Deere 4xx0/4xx5	1-117-5030-030	$500.00
John Deere 8xx0/9xx0	1-117-5030-033	$500.00
John Deere 6x20/6x30	1-117-5030-034	$500.00
John Deere 7x20/7x30	1-117-5030-034	$500.00
John Deere 6x20/6x30 Premium	1-117-5030-042	$500.00
John Deere 7x20/7x30 Premium	1-117-5030-042	$500.00
John Deere 7x00/7x10	1-117-5030-038	$500.00
John Deere STS 50/60/70 Series Combines	1-117-5030-050	$500.00
John Deere 8x60/8x70	1-117-5030-063	$500.00

Guidance & Steering

SmarTrax™ MD

Kits, SmarTrax™ MD

Install Kits

New Holland

New Holland T80x0/TG	1-117-5030-039	$500.00
New Holland 8x70/8x70A	1-117-5030-041	$500.00
New Holland CR/CX Combine	1-117-5030-051	$500.00
New Holland T60x0/TS	1-117-5030-032	$500.00
New Holland T70x0/T7.xxx	1-117-5030-032	$500.00
New Holland T90x0/T9.xxx/TJ	1-117-5030-061	$500.00

Versatile

Versatile 190-305	1-117-5030-041	$500.00
Versatile 846/876/946/976	1-117-5030-062	$500.00
Versatile 305-575 (2012 & Older)	1-117-5030-064	$500.00
Versatile 350-550 (2012 & Newer)	1-117-5030-060	$500.00

Components

SmarTrax MD Upgrade Cable GEN I Viper Pro/Envizio Pro	1-115-4001-207	$140.00
SmarTrax MD Node	1-063-4001-013	$820.00
SmarTrax MD Unit	1-063-4001-010	$3,060.00
SmarTrax MD Anti-rotation pin	1-107-4001-004	$26.00
SmarTrax MD Controller Transfer Kit	1-117-5030-019	$1,175.00

Cables

Cable, SmarTrax MD to Node	1-115-4001-157	$258.00
Cable, Viper Pro/Envizio Pro systems	1-115-0172-001	$444.00
Cable, Cruizer II (Chassis Cable Interface)	1-115-4001-066	$181.00
Cable, 6" Tee, SmarTrax to Cab	1-115-4001-070	$159.00
Cable, 72" Tee, SmarTrax to Cab	1-115-4001-071	$238.00
Cable, Chassis, Steering Only Systems (includes SmarTrax tee)	1-115-4001-085	$232.00

Enable Switches

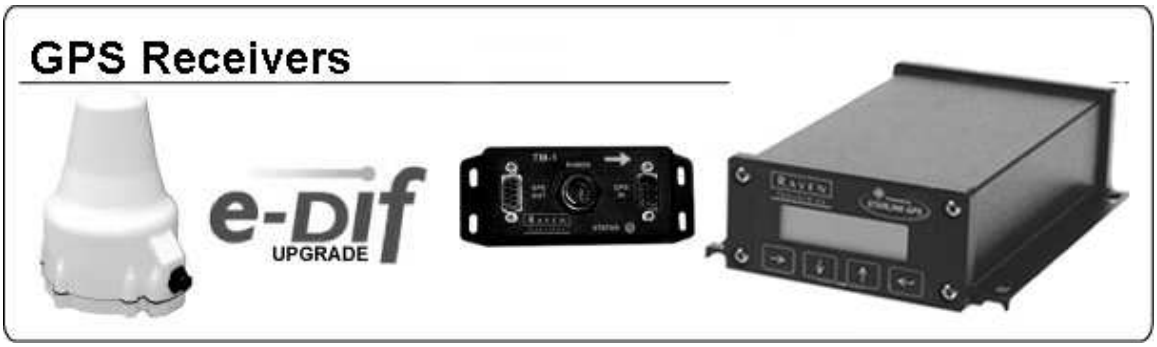
SmarTrax MD Foot Switch (4 pin)	1-063-0173-593	$131.00
SmarTrax MD Rocker Switch (4 Pin)	1-063-0173-613	$77.00

Spline Adapter Sets

Spline Adapter, 5/8" (16mm) 36 Tooth	1-063-4001-014	$179.00
Spline Adapter, 7/8" (22mm) 36 Tooth	1-063-4001-015	$179.00
Spline Adapter, 3/4" (20mm) 36 Tooth	1-063-4001-022	$250.00
Spline Adapter, 7/8" (22mm) 36 Tooth, Long	1-063-4001-024	$250.00
Spline Adapter, 11/16" 36 Tooth	1-063-4001-025	$250.00

Guidance & Steering

GPS Receivers



Kits, GPS Receivers

***GS includes GLONASS Unlock**

Kit, Phoenix 10™ (Speed Only)	1-117-0171-165	$460.00
Kit, Phoenix 50™ (Single Port Cable)	1-117-0171-149	$790.00
Kit, Phoenix 50™ (Dual Port Cable)	1-117-0171-164	$855.00
Kit, Phoenix 200™ Smart Antenna (10 Hz, SBAS)	1-117-0171-071	$1,685.00
Kit, Phoenix 300™ w/ MBA-6 Antenna (10Hz, RTK, GS)*	1-117-0171-303	$6,025.00
Kit, Phoenix 300™ w/ MBA-6 Antenna (10Hz, SBAS)	1-117-0171-603	$5,510.00

Cables, GPS Receivers

Cable, RS-232 Null Modem 10'	1-115-0159-822	$106.00
Cable, RS-232 Null Modem 3'	1-115-0171-040	$66.00
Cable, Antenna (210/310/400c/410/P300)	1-115-0171-117	$75.00
Cable, Power (210/310/400c/410/P300)	1-115-0171-118	$46.00
Cable, PC (210/310/400c/410/P300) 6'	1-115-0171-119	$80.00
Cable, Speed Adapter (210/310/400c/410/P300) to Port B	1-115-0171-166	$255.00
Cable, Raven Receiver to GreenStar	1-115-0171-177	$146.00
Cable, Speed Adapter (115/P200/P250) to Port A	1-115-0171-216	$138.00
Cable, PC (210/310/400c/410/P300) 12'	1-115-0171-272	$86.00
Cable, 50', Antenna TNC TO TNC 8240 for 210/310/400c/410/P300	1-115-0171-287	$83.00
Cable, Invicta™ 115/P200 - Straight Connector	1-115-0171-361	$221.00
Cable, 6', Antenna TNC (M) to Bulkhead	1-115-0171-481	$73.00
GPS Y-cable (single to double)	1-115-0171-689	$161.00
Cable, 15' Interface Phoenix 10™ Speed	1-115-0171-817	$132.00
Cable, 15' Interface Phoenix 50™ (Single)	1-115-0171-818	$194.00
Cable, 15' Interface Phoenix 50™ w/Port B (Dual)	1-115-0171-819	$255.00
Cable, Adapter, Cruizer II, Chassis Cable Interface, External GPS	1-115-4001-095	$109.00
Cable, RS-232 Extension, 10'	1-115-0171-891	$94.00
Adapter Cable, P300/Slingshot/PC	1-115-0171-998	$319.00

Components, GPS Receivers

***GS includes GLONASS Unlock**

Phoenix 10™ Speed Sensor	1-063-0172-988	$460.00
Phoenix 50™ Smart Antenna	1-063-0172-914	$740.00
Phoenix 200™ Smart Antenna (SBAS)	1-063-0172-719	$1,585.00
Phoenix 300™ Receiver Only (SBAS and GS)*	1-063-0173-679	$5,615.00
Phoenix 300™ Receiver Only (SBAS)	1-063-0173-684	$3,695.00
Phoenix 300™ Receiver Only (RTK and GS)*	1-063-0173-559	$5,105.00

Guidance & Steering

GPS Receivers

Software, GPS Receivers

***GPS serial number needed from GPS health screen at time of order**

e-Dif Upgrade for P200 (SN below 6866), Cruizer (Machine ID# begins w/ "H"), Envizio Pro (Machine ID# below 100000)*	1-077-0180-017	$610.00
e-Dif Upgrade for P200 (SN above 6866), Cruizer (Machine ID# does not begin w/ "H"), Envizio Pro (Machine ID# above 100000)	1-077-0180-044	$615.00
Phoenix 300™ , OmniSTAR HP-XP Upgrade	1-077-0180-019	$2,000.00
Phoenix 300™ GLONASS upgrade	1-077-0180-032	$1,035.00
RTK Unlock Code (from SBAS to RTK)	1-077-0180-021	$4,000.00
RTK Unlock Code (from XP/HP to RTK)	1-077-0180-014	$2,000.00

P300 with USB (Upgrade to GS Corrections and/or RTK)

Note: Customers with no existing OmniSTAR unlocks wanting to upgrade to GS Coreections and/or RTK.

From Base Level

Note: Receiver and/or field computer comes capable of SBAS, which includes WAAS, EGNOS, MSAS

GLONASS (only adds GLONASS to Base Level)	1-077-0180-083	$500.00
GS (includes GLONASS)	1-077-0180-116	$2,000.00
RTK (includes GLONASS)	1-077-0180-117	$4,000.00

From SBAS + GLONASS

GS (includes GLONASS)	1-077-0180-119	$1,500.00
RTK (includes GLONASS)	1-077-0180-118	$3,500.00

From SBAS + GS + GLOSS

RTK (includes GLONASS)	1-077-0180-120	$2,000.00

P300 with USB (OmniSTAR to GS Unlocks (No Charge Unlocks))

Note: Customers with existing OmniSTAR unlocks wanting to upgrade to GS Corrections will need to unlock the GS capability in their GPS receiver or Raven field computer. There will be NO COST to do this, however the normal order and authorization process will need to be followed with the below part numbers.

SBAS + OmniSTAR to SBAS + GS + GLONASS	1-077-0180-124	$0.00
SBAS + OmniSTAR + GLONASS to SBAS + GS + GLONASS	1-077-0180-125	$0.00
SBAS + OmniSTAR + RTK to SBAS + GS + GLONASS	1-077-0180-126	$0.00
SBAS + OmniSTAR + RTK + GLONASS to SBAS + GS + RTK + GLONASS	1-077-0180-127	$0.00

P300 (Compatibility Requirements) for GS

Description	REV	Software	GPS Engine Software
Phoenix 300 w/ USB port	All	3.02.0006	OEM060400RNOOO

NOTE: If you have an older version receiver and/or field computer that is not compatible with the requirements listed above and you are seeking an unlock for OmniSTAR corrections, please utilize Raven SmartQuote to obtain the authorization code. Any receiver SN # BFN1345XXXX and greater are not able to utilize OmniSTAR. Please refer to GS Corrections.

Guidance & Steering

GPS Receivers

Tilt

Kit, TM-1 Tilt Sensor	1-117-0171-059	$560.00

Manuals, GPS Receivers

Note: Quick Start Guides available online at RavenHelp.com

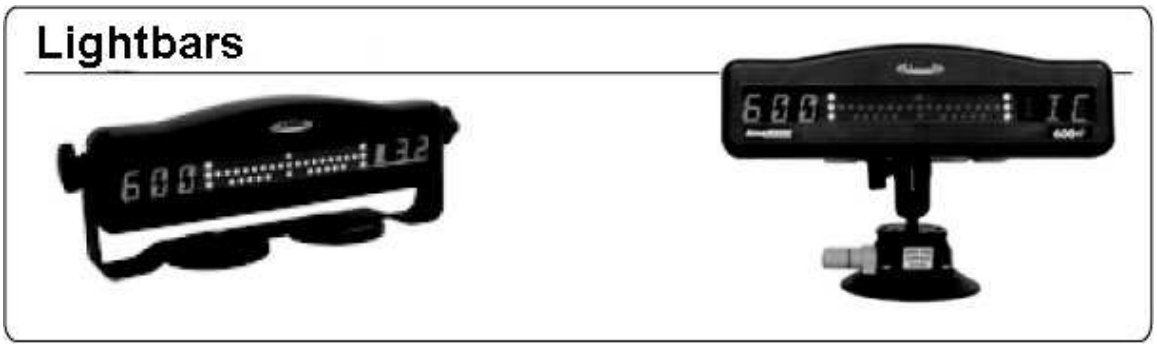
Phoenix 200™ Manual	1-016-0171-059	$16.00
Phoenix 300™ Manual w/out USB	1-016-0171-060	$9.20
Phoenix 300™ Manual w/ USB	1-016-0171-548	$5.20
Phoenix 50™ Manual	1-016-0171-211	$6.55
Phoenix 10™ Manual	1-016-0171-215	$6.30
TM-1 Manual	1-016-0171-049	$15.00

Antennas

Antenna MBA-2 (Invicta™ 210) (L1 GPS/Beacon/WAAS)	1-063-0171-924	$590.00
Antenna MBA-3 (Envizio Pro/Cruizer) (L1 GPS/L-Band/WAAS)	1-063-0172-480	$590.00
Antenna MBA-4 (Invicta™ 310) (L1 GPS/Beacon/L-Band/WAAS)	1-063-0171-922	$805.00
Antenna MBA-6 (Phoenix 300™) (L1/L2 GPS/L-Band/WAAS)	1-063-0172-651	$795.00
Antenna Patch (Invicta™ 110, Cruizer, Envizio Pro) (L1 GPS, WAAS)	1-063-0172-101	$82.00
Antenna Mounting Plate	1-063-0172-971	$16.00

Guidance & Steering

Lightbars



Kits, Lightbars

Kit, RGL 600 (210/310/410/400c/P300)	1-117-0159-881	$1,195.00
Kit, RGL 600 (110/115/Universal/P200/P250)	1-117-0159-882	$1,195.00
Kit, RGL 600 w/ Wireless Switchbox (210/310/410/400c/P300)	1-117-0159-968	$1,195.00
Kit, RGL 600 w/ Wireless Switchbox (110/115/Universal/P200/P250)	1-117-0159-969	$1,195.00
Kit, RGL 600ic	1-117-0159-991	$875.00

Cables, Lightbars

Cable, RGL 500/600 Update Cable Set	1-117-0159-983	$388.00
Cable, RGL 600ic Update	1-115-0171-583	$132.00
Cable, RGL 600ic Update	1-117-0171-011	$388.00
Cable, COM3 to Lightbar Switchbox Adapter	1-115-0171-572	$107.00
Cable, COM3 to Lightbar Switchbox Adapter	1-115-0171-773	$148.00
Cable, Envizio to RGL600ic Power Adapter	1-115-0171-349	$84.00
Cable, RGL 500/600 to Switchbox	1-115-0171-137	$183.00
Cable, 210/310 Switchbox to DB-9 Adapter	1-115-0171-227	$106.00
Cable, Raven Lightbar "Y" to SF-2000R	1-115-0171-169	$124.00
Cable, Raven Lightbar to StarFire w/ power	1-115-0171-396	$106.00
Cable, 36', Lightbar to 210/310/400c/410/P300 for Wireless Switchbox	1-115-0171-394	$183.00
Cable, Switchbox Panel Mount RGL 600	1-115-0171-482	$158.00
Cable, 36', Lightbar to 115/P200/Universal for Wireless Switchbox	1-115-0171-401	$226.00

Components, Lightbars

RGL 600 (Lightbar Only)	1-063-0172-346	$820.00
RGL 600ic (Lightbar Only)	1-063-0172-549	$820.00

Switchboxes, Lightbars

Switchbox for RGL 500/600 to 210/310/410/P300	1-063-0171-953	$381.00
Switchbox for RGL 500/600 to 115/Universal/P200	1-063-0171-954	$381.00
Wireless Switchbox	1-063-0172-368	$130.00
Wireless Switchbox Kit (210/310/410/P300)	9-117-0159-937	$281.00

Miscellaneous, Lightbars

Magnet Mount (Invicta™)	1-418-0000-008	$81.00
Magnetic Mounting Kit for RGL 600	1-117-0159-930	$31.00
Bracket, RGL600 Mounting	1-107-0171-477	$26.00
Suction Cup	1-103-0159-007	$68.00

Guidance & Steering

Lightbars

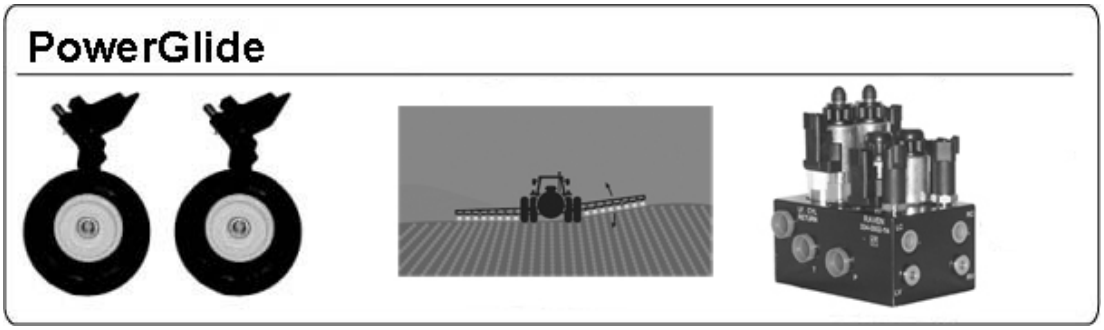
Manuals, Lightbars

RGL 600 Lightbar Manual	1-016-0159-936	$9.20
RGL 500/600 Quick Start Guide	1-016-0159-856	$4.75

Boom Controls

AutoBoom®

PowerGlide



The Raven AutoBoom® Glide Series provides automatic boom height control for sprayers. It is available in three different versions: PowerGlide, PowerGlide Plus, and UltraGlide. The PowerGlide is a low-cost leveling system that utilizes touch-down wheels to maintain height. The PowerGlide Plus is very similar to the PowerGlide but adds the ability to adjust lift and pressure from the cab. UltraGlide uses ultrasonic sensors that measure boom height. If the boom is too low, the UltraGlide system will increase pressure in the system until the boom rises to the correct height. If the boom is too high, the system reduces the lift pressure causing the booms to lower.

How to order an AutoBoom® PowerGlide Kit:

1. Identify the make, model, Model Year and boom width of machine:
- e.g. Flex-Coil 68, Case SRX 2007 & Newer, 120'-134' Boom

2. Select Installation kit from PowerGlide price list (117-0230-XXX).

3. Order a PowerGlide Controller Kit (see following page).

4. Order Axle kit from price list.
Note: PowerGlide kits do not come with axles, wheels or struts. Please select an axle kit from the price list. Some machines (such as some AGCO, CaseIH and Flexi-Coil models) require special wheel struts.

5. Order Touchdown "Little Wheel" Kits (optional).
Note: These wheels are optional and are to be used in conjunction with the standard gauge wheel kits. They are not designed to be used as the only wheels on a boom.

Boom Controls

AutoBoom®

PowerGlide

PowerGlide Controller Kit

Kit, PowerGlide Controller w/ cables	1-117-0137-022	$1,700.00

Self-Propelled Kits, PowerGlide

Note: PowerGlide kits require an axle kit. See the 'Axle Kits' section for available axle kits.

AGCO

AGCO, RoGator, 664, 54 Series (pre-97)	1-117-0230-018	$2,150.00
AGCO, RoGator, 64/74/86/SS Series	1-117-0230-044	$1,830.00

CaseIH

Case IH, 4260/4410	1-117-0230-006	$1,620.00
Case IH, 4420/3320	1-117-0230-075	$1,830.00

Equipment Technologies

Apache, 2005 - 2006	1-117-0230-076	$1,705.00
Apache, 2007 & Newer	1-117-0230-017	$1,620.00
Apache, Pre-2004 AS Series and 859 (CLOSED CENTER HYD. ONLY)	1-117-0230-013	$1,620.00

Miller

Miller Nitro, 2200HT/2275HT/220/200/N2, 90'-100' boom	1-117-0230-004	$1,620.00

Willmar

Willmar 6000-7000 Series	1-117-0230-016	$2,150.00
Willmar, 8500	1-117-0230-014	$2,150.00

Pull-Type Kits, PowerGlide

Note: For all pull-type sprayers, the hydraulic valve in the standard kit is setup for OPEN center operation.

The sprayer hydraulic valve may need to be converted from closed center to open center mode. Contact the machine dealer for assistance.

Fast

Fast, 9500/9600, 60' boom	1-117-0230-023	$1,830.00
Fast, 9600, 80-120' boom	1-117-0230-096	$1,830.00

Flexicoil

Flexicoil, 67 series, 2006 & Older, w/out Windscreen	1-117-0230-024	$1,830.00
Flexicoil, 67 series, 2006 & Older, w/Windscreen	1-117-0230-041	$1,830.00
Flexicoil, 68 series, Case SRX, 2007 & Newer, 80'-100' boom	1-117-0230-070	$1,830.00
Flexicoil, 68 series, Case SRX, 2007 & Newer, 120'-134' boom	1-117-0230-071	$1,830.00

Schaben

Schaben 8500, 8650 90' booms	1-117-0230-034	$1,830.00

Summers

Summers (80', 90', 110')	1-117-0230-033	$1,830.00
Summer Ultimate NT (120', 132')	1-117-0230-067	$1,830.00

Boom Controls

AutoBoom®

PowerGlide

Pull-Type Kits, PowerGlide

Top Air

Top Air, ALL MODELS	1-117-0230-059	$1,925.00

Axle Kits

Note: Axle kit options are ONLY for PowerGlide kits. PowerGlide Plus installation kits include the axles.

Kits consisting of two strut assemblies

Offset Rigid Strut Kit	1-117-0131-039	$700.00
Straight strut kit 34"	1-117-0131-041	$336.00
Suspension strut kit	1-117-0131-042	$925.00
Straight strut kit 24"	1-117-0131-040	$332.00
Offset suspension strut kit	1-117-0131-068	$1,035.00

Machine-Specific Kits

***May use 117-0131-042 or 117-0131-041**
****May use 117-0131-039 or 117-0131-068**

AGCO Sprayers (RoGator & Spra-Coupe)*	1-117-0131-042	$925.00
Case IH - 117-0230-005/079 (3150 / 3185 / Patriot WT)**	1-117-0131-039	$700.00
Flexicoil 67 series - 117-0230-041 (w/ Windscreen)	1-117-0131-038	$462.00
Flexicoil 68 series/Case SRX - 117-0230-071 (without Windscreen)**	1-117-0131-039	$700.00

Touchdown "Little Wheel" Wheel Kits (optional)

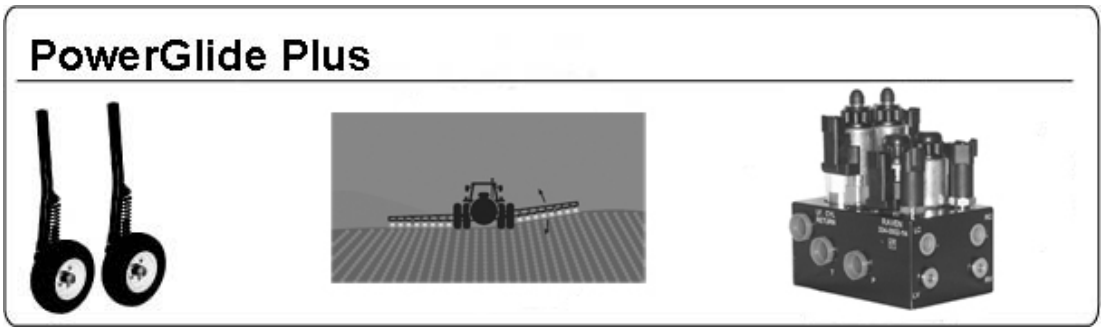
Note: These wheels are optional and are to be used in conjunction with Standard Gauge Wheels.

Apache (caster)	1-117-0135-005	$456.00
Case (caster)	1-117-0135-003	$456.00
Hardi (fixed)	1-117-0135-008	$382.00
John Deere 4700/4710/4720 (fixed)	1-117-0135-004	$409.00
John Deere 4730/4830/4920/4930/4940 (fixed)	1-117-0135-001	$382.00
Miller (caster)	1-117-0135-007	$456.00
RoGator (caster)	1-117-0135-002	$456.00
Spra-Coupe (caster)	1-117-0135-010	$456.00
Top Air (caster)	1-117-0135-011	$456.00

Boom Controls

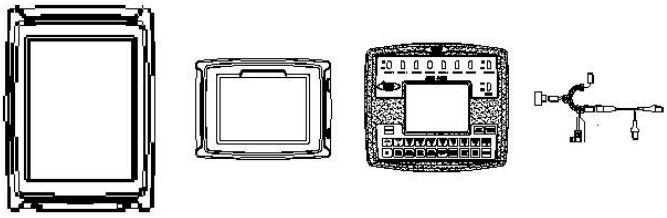
AutoBoom®

CAN PowerGlide Plus



How to order an AutoBoom® PowerGlide Plus with GEN I Cabling:

Note: PowerGlide Plus kit comes with axles, wheels and struts.



1. Identify the make, model, Model Year and boom width of machine:

- e.g. John Deere, 4930, Model Year 2009, 120' boom

2. Select Installation kit from PowerGlide Plus price list (117-0231-XXX).

Note: PowerGlide Plus kits come with axles, wheels and struts. Please do not order Axle Kits with PowerGlide Plus systems.

3. Order a CAN AutoBoom® PowerGlide Plus Controller kit (117-0137-023) if the installation kit does not include one.

4. Order Raven Console kit if the following are not already present on machine:

Viper Pro™, Envizio Pro II®, SCS 4070™, SCS 4400™, SCS 4600™, SCS 5000™

OR

CAN AutoBoom Console Kit (117-0137-025)

5. Order a CANBUS power adapter and terminators (1-117-0159-923).

Note: Not needed if already present on machine or ordering a 1-117-0137-025 kit.

6. Order Touchdown "Little Wheel" Kits (optional).

Note: These wheels are optional and are to be used in conjunction with the standard gauge wheel kits. They are not designed to be used as the only wheels on a boom.

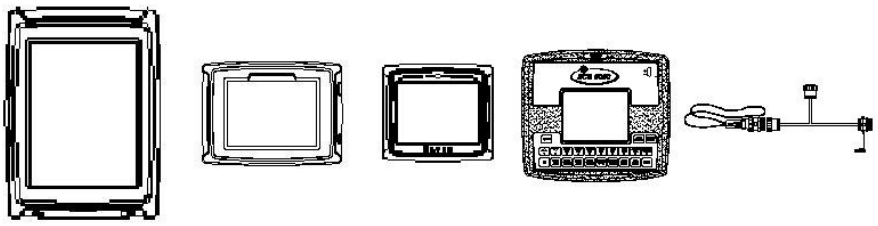
Boom Controls

AutoBoom®

CAN PowerGlide Plus

How to order AutoBoom® PowerGlide Plus with GEN II Cabling

Note: PowerGlide Plus kit comes with axles, wheels and struts. Reference Application Drawing 054-5130-004.



1. Identify the make, model, Model Year and boom width of machine:

- e.g. John Deere, 4930, Model Year 2009, 120' boom

2. Select Installation kit from PowerGlide Plus price list (117-0231-XXX).

Note: PowerGlide Plus kits come with axles, wheels and struts. Please do not order Axle Kits with PowerGlide Plus systems.

3. Order a CAN AutoBoom® PowerGlide Plus Controller kit (117-5130-001) if the installation kit does not include one.

4. Order Raven Console kit if the following are not already present on machine:

Viper Pro™, Envizio Pro II®, SCS 4070™, SCS 4400™, SCS 4600™, SCS 5000™

OR

CAN AutoBoom Console Kit (117-5130-004)

5. Order a CAN/Power Extension Tee cable.

Note: Extension tee cable should reach from the sprayer's boom function hydraulic valve on the sprayer center section to the cab of the machine on self-propelled units OR to approximately three feet in front of the hitch on pull-type units.

If additional Raven control nodes (product control, injection) are already present on the machine, extension cable should reach from boom function hydraulic valve on the sprayer center section to the already present control node.

Most pull-type and self-propelled sprayers will utilize the 24 or 36 foot extension tee cables. Please see 'CAN Power Tee Kit & Extension Cables' for a complete list of available cables.

Boom Controls

AutoBoom®

CAN PowerGlide Plus

How to order AutoBoom® PowerGlide Plus with ISOBUS Cabling

Note: Reference Application Drawings 054-6130-004, 054-6130-005 or 054-6130-006.

1. Identify the make, model, Model Year and boom width of machine:

- e.g. John Deere, 4930, Model Year 2009, 120' boom

2. Select Installation kit from PowerGlide Plus price list (117-0231-XXX).

Note: PowerGlide Plus kits come with axles, wheels and struts. Please do not order Axle Kits with PowerGlide Plus systems.

3. Order an ISO AutoBoom® PowerGlide Plus Controller kit (see following page).

Boom Controls

AutoBoom®

CAN PowerGlide Plus

CAN PowerGlide Plus Controller Kits

Kit, CAN PowerGlide Plus (use w/ GEN I cabling)	1-117-0137-023	$2,205.00
Kit, CAN PowerGlide Plus (use w/ GEN II cabling)	1-117-5130-001	$2,205.00

CAN AutoBoom Console Kits

***Includes 1-117-0159-923 CAN Power/Tee Terminator Kit.**

Kit, CAN AutoBoom Console (use w/ GEN I cabling)*	1-117-0137-025	$1,025.00
Kit, CAN AutoBoom Console Kit (use w/ GEN II cabling)	1-117-5130-004	$1,025.00

ISO PowerGlide Plus Controller Kits

***For sprayers using John Deere ISOBUS product control, an adapter cable is needed (115-0171-991).**
****For sprayers using ISO product control, Raven or John Deere, an extension cable is needed. The cable should reach from the sprayer's boom function hydraulic valve to the ISO product control node. Most pull-type and self-propelled sprayers will utilize the 24' or 36' extension cables. Please see 'ISO Adapter & Implement Extension Tee Cables' section for a complete list of cable options.**

Kit, ISO, CAN PowerGlide Plus, Pull-Type Sprayer w/ 2008 and newer JD ISO product control*	1-117-0137-037	$2,920.00
Kit, ISO, CAN PowerGlide Plus, Pull-Type Sprayer w/ Raven ISO product control**	1-117-0137-037	$2,920.00
Kit, ISO, CAN PowerGlide Plus, AGCO Self-Propelled w/ Falcon VT	1-117-0137-039	$3,045.00
Kit, ISO, CAN PowerGlide Plus, John Deere 4920/4630/4730, MY 2008+ 4830/4930	1-117-0137-038	$2,920.00
Kit, ISO, CAN PowerGlide Plus, John Deere 4700/4710 w/ GS2 or newer	1-117-0137-052	$2,920.00
Kit, ISO, CAN PowerGlide Plus, John Deere 4720 w/ GS2 or newer	1-117-0137-050	$2,920.00
Kit, ISO, CAN PowerGlide Plus, John Deere 4830 (MY 2007 and older) w/ GS2 or newer	1-117-0137-050	$2,920.00

CAN Power Tee Kit & Extension Cables

Kit, CAN Power Tee/Terminator	1-117-0159-923	$194.00
Cable, Implement Extension Tee, 12"	1-115-0171-928	$232.00
Cable, Implement Extension Tee, 6’	1-115-0171-951	$284.00
Cable, Implement Extension Tee, 12’	1-115-0171-916	$310.00
Cable, Implement Extension Tee, 24’	1-115-0171-917	$361.00
Cable, Implement Extension Tee, 36’	1-115-0171-934	$439.00

ISO Adapter & Implement Extension Tee Cables

Cable Adapter, John Deere ISO to Raven ISO	1-115-0171-991	$164.00
Cable, ISO Implement Extension Tee, 12"	1-115-0171-960	$316.00
Cable, ISO Implement Extension Tee, 6’	1-115-0171-961	$349.00
Cable, ISO Implement Extension Tee, 12’	1-115-0171-931	$403.00
Cable, ISO Implement Extension Tee, 24’	1-115-0171-932	$478.00
Cable, ISO Implement Extension Tee, 36’	1-115-0171-933	$555.00

Boom Controls

AutoBoom®

CAN PowerGlide Plus

Self-Propelled Kits, CAN PowerGlide Plus

Note: CAN PowerGlide Plus kits include suspension wheel struts unless noted.
***Includes Controller Kit (1-117-0137-023)**

AGCO

AGCO, RoGator, 54 Series, 97 and newer, 90'-100' boom	1-117-0231-001	$2,495.00
AGCO, RoGator, 664, 54 Series (pre-97)	1-117-0231-018	$2,495.00
AGCO, RoGator, 64/74/86/SS Series	1-117-0231-044	$2,495.00
AGCO, RoGator, 2009 & Newer	1-117-0231-087	$2,495.00
AGCO, TerraGator, 2007 & Older (liquid only)	1-117-0231-053	$2,495.00
AGCO RoGator 54 Series 97 & Newer (80' boom)	1-117-0231-037	$2,495.00

Apache

Apache 2005 - 2006	1-117-0231-076	$2,495.00
Apache 2007 - 2008 (2009 and newer order from Equipment Technologies)	1-117-0231-017	$2,495.00
Apache, pre-2004 AS Series and 859 (CLOSED CENTER HYD. ONLY)	1-117-0231-013	$2,495.00

Buhler

Versatile SX275*	1-117-0231-097	$4,695.00
Farm King 850/1200/1600	1-117-0231-035	$2,495.00

CaseIH

CaseIH, 3150/3185/Patriot, 2005 and older (except 75' boom)	1-117-0231-005	$2,495.00
CaseIH, 3150/3185, 2006 & Newer (except 75' boom)	1-117-0231-079	$2,495.00
CaseIH, 3200/3200B, 2002 & Newer/SN #3805 and up	1-117-0231-039	$2,495.00
CaseIH, 3200/3200B, pre-2002/SN #3804 and down	1-117-0231-042	$2,495.00
CaseIH, SPX 3310	1-117-0231-046	$2,495.00
CaseIH, 4260/4410	1-117-0231-006	$2,495.00
CaseIH, 4420/3320, 2009 & Older, 90'-100' boom	1-117-0231-075	$2,495.00
CaseIH, 4420/3320, 120' boom, without Autofold	1-117-0231-088	$2,495.00
CaseIH, 4420/3330, 120' boom, with Autofold*	1-117-0231-091	$4,695.00
CaseIH 3230/3330/4420, 2010 & Newer (90' - 100')*	1-117-0231-095	$4,695.00

GVM

GVM Predator, 2007 & Older	1-117-0231-050	$2,495.00
GVM Predator (2008 & Newer) / Prowler (2004 & Newer)*	1-117-0231-083	$4,695.00

John Deere

John Deere, 4700, 1998 & Older	1-117-0231-012	$2,495.00
John Deere, 4700 (1999 & Newer)/4710	1-117-0231-019	$2,495.00
John Deere, 4720/4730/4830	1-117-0231-020	$2,495.00
John Deere, 4920	1-117-0231-011	$2,495.00
John Deere, 4930/4940	1-117-0231-084	$2,495.00

Boom Controls

AutoBoom®

CAN PowerGlide Plus

Self-Propelled Kits, CAN PowerGlide Plus

Miller

Miller Condor, Spray-Air Boom, 2009 & Older	1-117-0231-081	$2,495.00
Miller Condor, Monoboom, 2009 & Older	1-117-0231-077	$2,495.00
Miller Condor, Monoboom, 2010 & Newer (order wheel brackets 44.22556 and 44.22557 from Miller)*	1-117-0231-094	$4,695.00
Miller Condor, Spray-Air Boom, 2010 & Newer*	1-117-0231-093	$4,695.00
Miller Nitro, 4000 Series, 90'-100' boom*	1-117-0231-082	$4,695.00
Miller Nitro, 2200HT/2275HT/220/200/N2, 90'-100' boom*	1-117-0231-004	$4,695.00
Miller Nitro, 3000 Series, (SN 21.12733 and higher) 90'-100' boom*	1-117-0231-074	$4,695.00
Miller Nitro 3000 Series (SN 21.12732 and lower) 90'-100'*	1-117-0231-004	$4,695.00

Spra-Coupe

***Requires node mounting kit 1-117-0171-342 if AccuBoom is not already present on machine.**

Spra-Coupe 7x50	1-117-0231-049	$4,225.00
Spra-Coupe 7X60, 2009 & Older	1-117-0231-086	$2,495.00
Spra-Coupe 7X60, 2010 & Newer*	1-117-0231-098	$4,695.00

Willmar

Willmar, 6000-7000 Series	1-117-0231-016	$2,495.00
Willmar, 8500	1-117-0231-014	$2,495.00
Willmar 8650, RoGator boom only	1-117-0231-044	$2,495.00

Pull-Type Kits, CAN PowerGlide Plus

*** CAN PowerGlide Plus kits include suspension wheel struts unless noted.**

NOTE: For all pull-type sprayers, the hydraulic valve in the standard kit is setup for OPEN center operation.

The sprayer hydraulic valve may need to be converted from closed center to open center mode. Contact the machine dealer for assistance.

Bestway

Bestway, 2008 & Older	1-117-0231-036	$2,495.00
Bestway, 2009/V-ride Boom	1-117-0231-090	$2,495.00

Fast

Fast, 9500/9600, 60' boom	1-117-0231-023	$2,495.00
Fast 9600 (80'-120')	1-117-0231-096	$2,495.00

Flexicoil

Flexicoil, 67 Series, 2006 & Older, without Windscreen	1-117-0231-024	$2,495.00
Flexicoil, 67 Series, 2006 & Older, with Windscreen	1-117-0231-041	$2,495.00
Flexicoil, 68 Series/Case SRX, 2007 & Newer, 80', 90', 100' boom	1-117-0231-070	$2,495.00
Flexicoil, 68 Series/Case SRX, 2007 & Newer, 120', 132' boom	1-117-0231-071	$2,495.00

Gregson

Gregson, 2008 and older, Fasse valve, Live Hydraulics	1-117-0231-031	$2,495.00

Boom Controls

AutoBoom®

CAN PowerGlide Plus

Pull-Type Kits, CAN PowerGlide Plus

Hardi

Hardi Eagle, HZ boom, 2009 & Newer	1-117-0231-026	$2,495.00
Hardi Force	1-117-0231-028	$2,495.00

Miller

Miller Pro	1-117-0231-078	$2,495.00

Redball

Redball, 555/570/580/655	1-117-0231-035	$2,495.00
Redball, 670/680	1-117-0231-073	$2,495.00
Redball, 690	1-117-0231-066	$2,495.00

Schaben

Schaben 8500, 8650 (90' booms and smaller)	1-117-0231-034	$2,495.00
Schaben 8650 120' booms	1-117-0231-104	$2,495.00

Summers

Summers (80', 90', 110')	1-117-0231-033	$2,495.00
Summers Ultimate NT	1-117-0231-067	$2,495.00

Top Air

Top Air, ALL MODELS	1-117-0231-059	$2,495.00

PowerGlide Plus to UltraGlide Upgrade (Square Coil Valve)

AGCO RoGator, 2004 & Newer	1-117-0131-051	$3,605.00
Apache	1-117-0131-051	$3,605.00
Apache, CaseIH 3310/4410/4260	1-117-0131-077	$3,605.00
Bestway	1-117-0131-059	$3,605.00
CaseIH 3150-3185/3200-3200B	1-117-0131-053	$3,605.00
CaseIH 3310/3320/3330/4260/4410/4420	1-117-0131-055	$3,605.00
Flexi-Coil/CaseIH SRX	1-117-0131-079	$3,605.00
Great Plains	1-117-0131-051	$3,605.00
Hardi Eagle	1-117-0131-057	$3,605.00
John Deere 4700/4710/4720/4830	1-117-0131-052	$3,605.00
John Deere 4920/4930	1-117-0131-054	$3,605.00
Miller Nitro, N1, N2, N3 Series	1-117-0131-050	$3,605.00
Miller Nitro N4, Condor w/Mono-Boom	1-117-0131-074	$3,605.00
Redball	1-117-0131-057	$3,605.00
RoGator, 2003 & Older	1-117-0131-075	$3,605.00
Schaben	1-117-0131-078	$3,605.00
Spra-Coupe 7x50/60	1-117-0131-076	$3,605.00
Spray-Air Boom	1-117-0131-063	$3,605.00
Top Air	1-117-0131-064	$3,605.00

Boom Controls

AutoBoom®

CAN PowerGlide Plus

PowerGlide Plus to UltraGlide Upgrade (Round Coil Valve)

Rogator, 2004 & Newer	1-117-0139-001	$3,605.00
John Deere, 47X0/4830	1-117-0139-002	$3,605.00
CaseIH 3150-3185, 3200-3200B, Patriot, 2004 & Older	1-117-0139-003	$3,605.00
John Dere 4920, 4930	1-117-0139-004	$3,605.00
CaseIH 3320/3330/4420	1-117-0139-005	$3,605.00
Hardi Eagle, Hardi Force	1-117-0139-006	$3,605.00
Redball, Summers	1-117-0139-007	$3,605.00
Fast	1-117-0139-008	$3,605.00
Great Plains, Best Way	1-117-0139-009	$3,605.00
Miller Nitro/Condor W/Mono-Boom	1-117-0139-010	$3,605.00
Spray Air Boom	1-117-0139-011	$3,605.00
Top Air	1-117-0139-012	$3,605.00
Rogator, 2003 & Older	1-117-0139-013	$3,605.00
Spra Coupe 7X50/60	1-117-0139-014	$3,605.00
Apache, CaseIH 3310/4410/4260	1-117-0139-015	$3,605.00
Schaben	1-117-0139-016	$3,605.00
Flexi-Coil/SRX	1-117-0139-017	$3,605.00

ISO PowerGlide Plus to UltraGlide Upgrade

John Deere 4920/4930	1-117-0139-018	$2,955.00
John Deere 47X0/4830	1-117-0139-019	$2,955.00
Hardi Force/Eagle	1-117-0139-020	$2,955.00
Redball	1-117-0139-021	$2,955.00
Summers	1-117-0139-021	$2,955.00
Fast	1-117-0139-022	$2,955.00
Great Plains	1-117-0139-023	$2,955.00
Wylie Tilt-Wyng	1-117-0139-023	$2,955.00
Bestway	1-117-0139-023	$2,955.00
Spray-Air Boom	1-117-0139-024	$2,955.00
Top Air	1-117-0139-025	$2,955.00
Spra Coupe 7x50/60	1-117-0139-026	$2,955.00
Schaben	1-117-0139-027	$2,955.00
Flexi-Coil	1-117-0139-028	$2,955.00
CaseIH SRX	1-117-0139-028	$2,955.00

Touchdown "Little Wheel" Wheel Kits (optional)

Note: These wheels are optional and are to be used in conjunction with Standard Gauge Wheels.

Apache (caster)	1-117-0135-005	$456.00
Case (caster)	1-117-0135-003	$456.00
Hardi (fixed)	1-117-0135-008	$382.00
John Deere 4700/4710/4720 (fixed)	1-117-0135-004	$409.00
John Deere 4730/4830/4920/4930/4940 (fixed)	1-117-0135-001	$382.00
Miller (caster)	1-117-0135-007	$456.00
RoGator (caster)	1-117-0135-002	$456.00
Spra-Coupe (caster)	1-117-0135-010	$456.00
Top Air (caster)	1-117-0135-011	$456.00

Boom Controls

AutoBoom®

CAN PowerGlide Plus

G1 to UltraGlide Update

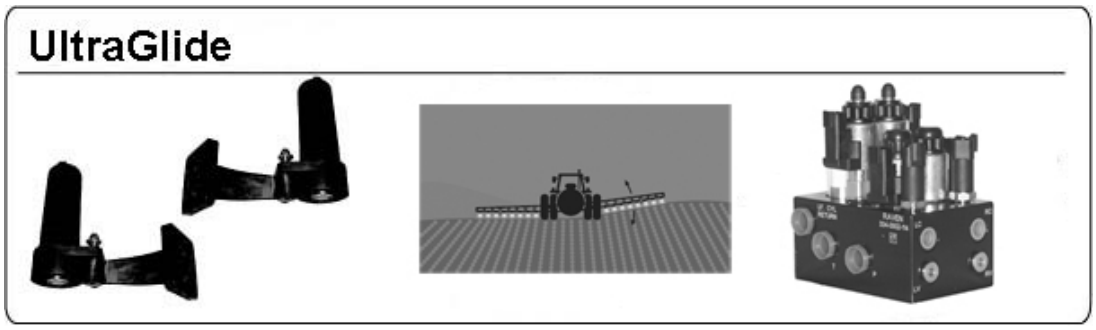
Note: The 1-117-0137-025 controller kit must be purchased if a Raven control console isn't already present on machine.

AGCO RoGator	1-117-0131-013	$3,480.00
Apache	1-117-0131-013	$3,480.00
CaseIH Self Propelled Sprayers	1-117-0131-017	$3,480.00
2007 Flexi-Coil 68 Series & CaseIH SRX Series, 80', 90', 100' Boom	1-117-0131-024	$3,480.00
2007 Flexi-Coil 68 Series & CaseIH SRX Series, 120' & 134' Booms	1-117-0131-025	$3,665.00
John Deere 4700/4710/4720 (Closed Center)	1-117-0131-014	$3,480.00
John Deere 4920/4930	1-117-0131-016	$3,480.00
Nitro N1/N2/N3	1-117-0131-012	$3,480.00
Spra-Coupe 7x50/7X60	1-117-0131-013	$3,480.00
Spray-Air Predator 2010	1-117-0131-061	$3,605.00
Top Air	1-117-0131-065	$3,480.00

Boom Controls

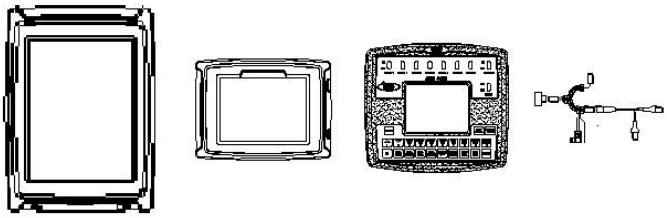
AutoBoom®

CAN UltraGlide



How to order an AutoBoom® UltraGlide kit with GEN I cabling:

Note: Reference Application Drawing 054-2400-001.



1. Identify the make, model, Model Year and boom width of machine.

- e.g. John Deere, 4930, Model Year 2009, 120' boom

2. Select Installation kit from UltraGlide price list (117-0232-XXX).

3. Order a CAN AutoBoom® UltraGlide Controller kit. Please see 'CAN UltraGlide Controller Kits' section for a complete list of kits.

4. Order Raven Console kit if the following are not already present on machine:

Viper Pro™, Envizio Pro II®, SCS 4070™, SCS 4400™, SCS 4600™, SCS 5000™

OR

CAN AutoBoom Console Kit (117-0137-025)

5. Order a CANBUS power adapter and terminators (1-117-0159-923).

Note: Not needed if already present on machine or ordering a 1-117-0137-025 kit.

6. Order Touchdown "Little Wheel" Kits (optional).

Note: These wheels are optional and are to be used in conjunction with the standard gauge wheel kits. They are not designed to be used as the only wheels on a boom.

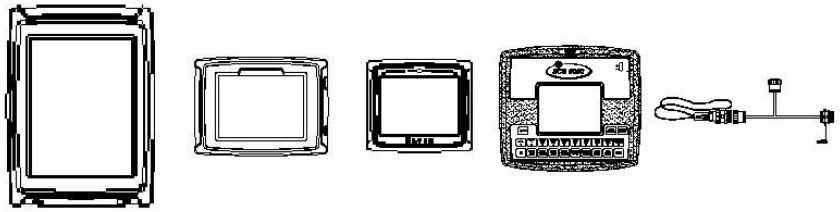
Boom Controls

AutoBoom®

CAN UltraGlide

How to order AutoBoom® UltraGlide with GEN II Cabling

Note: Reference Application Drawing 054-5130-004.



1. Identify the make, model, Model Year and boom width of machine.

- e.g. John Deere, 4930, Model Year 2009, 120' boom

2. Select Installation kit from UltraGlide price list (117-0232-XXX).

3. Order a CAN AutoBoom® UltraGlide Controller kit if the installation kit does not include one. Please see 'CAN UltraGlide Controller Kits' section for a complete list of kits.

4. Order Raven Console kit if the following are not already present on machine:

Viper Pro™, Envizio Pro II®, SCS 4070™, SCS 4400™, SCS 4600™, SCS 5000™

OR

CAN AutoBoom® Console Kit (117-5130-004)

5. Order a CAN/Power Extension Tee cable.

Note: Extension tee cable should reach from the sprayer's boom function hydraulic valve on the sprayer center section to the cab of the machine on self-propelled units OR to approximately three feet in front of the hitch on pull-type units.

If additional Raven control nodes (product control, injection) are already present on the machine, extension cable should reach from boom function hydraulic valve on the sprayer center section to the already present control node.

Most pull-type and self-propelled sprayers will utilize the 24' or 36' extension tee cables. Please see 'CAN Power Tee Kit & Extension Cables' for a complete list of available cables.

Boom Controls

AutoBoom®

CAN UltraGlide

How to order AutoBoom® UltraGlide kit with ISOBUS Cabling

Note: Reference Application Drawings 054-6130-004, 054-6130-005 or 054-6130-006.

1. Identify the make, model, Model Year and boom width of machine:

- e.g. John Deere, 4930, Model Year 2009, 120' boom

2. Select Installation kit from UltraGlide price list (117-0232-XXX).

Note: PowerGlide Plus kits come with axles, wheels and struts. Please do not order Axle Kits with PowerGlide Plus systems.

3. Order an ISO AutoBoom® UltraGlide Controller kit from the following list:

Boom Controls

AutoBoom®

CAN UltraGlide

CAN UltraGlide Controller Kits

Kit, UltraGlide CAN Controller, 100' booms & larger (use w/ GEN I cabling)	1-117-0137-024	$3,745.00
Kit, UltraGlide CAN Controller, 90' booms & smaller (Not compatible with John Deere 47xx, 4830) (use w/ GEN I cabling for 100' booms or larger)	1-117-0137-047	$3,745.00
Kit, UltraGlide CAN Controller, 3 point mounted booms (use w/ GEN I cabling)	1-117-0137-048	$3,745.00
Kit, UltraGlide CAN Controller, 90' booms & smaller (use w/ GEN II cabling)	1-117-5130-002	$3,225.00
Kit, UltraGlide CAN Controller, 100'-132' booms (use w/ GEN II cabling)	1-117-5130-003	$3,225.00

CAN AutoBoom Console Kits

***Includes 1-117-0159-923 CAN Power/Tee Terminator Kit.**

Kit, CAN AutoBoom Console (use w/ GEN I cabling)*	1-117-0137-025	$1,025.00
Kit, CAN AutoBoom Console (use w/ GEN II cabling)	1-117-5130-004	$1,025.00
Kit, CAN AutoBoom Console Miller N5/GC Series (Use w/ GEN II Cabling)	1-117-5130-005	$1,025.00

ISO UltraGlide Controller Kits

***For sprayers using John Deere ISOBUS product control, an adapter cable is needed (115-0171-991).**

****For sprayers using ISO product control, Raven or John Deere, an extension cable is needed. The cable should reach from the sprayer's boom function hydraulic valve to the ISO product control node. Most pull-type and self-propelled sprayers will utilize the 24' or 36' extension cables. Please see 'ISO Adapter & Implement Extension Tee Cables' section for a complete list of cable options.**

Kit, ISO, CAN UltraGlide, Pull-Type Sprayer w/ 2008 and newer JD ISO product control*	1-117-0137-041	$4,015.00
Kit, ISO, CAN UltraGlide, Pull-Type Sprayer w/ Raven ISO product control**	1-117-0137-041	$4,015.00
Kit, ISO, CAN UltraGlide, AGCO Self-Propelled w/ Falcon VT	1-117-0137-043	$4,525.00
Kit, ISO, CAN UltraGlide, John Deere 4920/4630/4730, MY 2008+ 4830/4930	1-117-0137-042	$4,525.00
Kit, ISO, CAN UltraGlide, John Deere 4700/4710 w/ GS2 or newer	1-117-0137-053	$4,525.00
Kit, ISO, CAN UltraGlide, John Deere 4720 w/ GS2 or newer	1-117-0137-051	$4,525.00
Kit, ISO, CAN UltraGlide, John Deere 4830 (MY 2007 and older) w/ GS2 or newer	1-117-0137-051	$4,525.00

CAN Power Tee Kit & Extension Cables

Kit, CAN Power Tee/Terminator	1-117-0159-923	$194.00
Cable, Implement Extension Tee, 12"	1-115-0171-928	$232.00
Cable, Implement Extension Tee, 6'	1-115-0171-951	$284.00
Cable, Implement Extension Tee, 12'	1-115-0171-916	$310.00
Cable, Implement Extension Tee, 24'	1-115-0171-917	$361.00
Cable, Implement Extension Tee, 36'	1-115-0171-934	$439.00

ISO Adapter & Implement Extension Tee Cables

Cable Adapter, John Deere ISO to Raven ISO	1-115-0171-991	$164.00
Cable, ISO Implement Extension Tee, 12"	1-115-0171-960	$316.00
Cable, ISO Implement Extension Tee, 6'	1-115-0171-961	$349.00
Cable, ISO Implement Extension Tee, 12'	1-115-0171-931	$403.00
Cable, ISO Implement Extension Tee, 24'	1-115-0171-932	$478.00
Cable, ISO Implement Extension Tee, 36'	1-115-0171-933	$555.00

Boom Controls

AutoBoom®

CAN UltraGlide

Self-Propelled Kits, CAN UltraGlide

CAN UltraGlide kits do not include wheel kits. Add-on wheels can be found in the Gauge Wheels kit section.

AGCO

***Includes "S" Sensor Bracket Kit (1-117-0131-082).**

AGCO, RoGator, 54 Series, 1997 and newer, 90'-100' boom*	1-117-0232-001	$4,085.00
AGCO, RoGator, 664, 54 Series (pre-97)*	1-117-0232-018	$4,085.00
AGCO, RoGator, 64/74/86/SS Series*	1-117-0232-044	$3,715.00
AGCO, RoGator, 2009 & Newer*	1-117-0232-087	$3,715.00
AGCO, TerraGator, 2007 & Older (liquid only)*	1-117-0232-053	$4,085.00
AGCO RoGator 54 Series 97 & Newer (80' boom)*	1-117-0232-037	$4,085.00

Apache

***Includes "S" Sensor Bracket Kit (1-117-0131-082).**

Apache, 2007-2008 (2009 and newer order from Equipment Technologies)*	1-117-0232-017	$3,715.00
Apache, 2005-2006*	1-117-0232-076	$3,715.00
Apache, pre-2004 and 859 (CLOSED CENTER HYD. ONLY)*	1-117-0232-013	$3,715.00

Buhler

Versatile SX275 (controller kit included)	1-117-0232-097	$7,165.00

CaseIH

***Includes "S" Sensor Bracket Kit (1-117-0131-082).**

CaseIH, 3200/3200B, 2002 & Newer/SN #3805 and up*	1-117-0232-039	$3,715.00
CaseIH, 3200/3200B, 2002 & Older/SN #3804 and down*	1-117-0232-042	$4,085.00
CaseIH, 3150/3185/Patriot WT, 2005 & Older (except 75' boom)*	1-117-0232-005	$4,085.00
CaseIH, 3150/3185, 2006 & Newer (except 75' boom)*	1-117-0232-079	$4,085.00
CaseIH, 3310*	1-117-0232-046	$3,715.00
CaseIH, 4260/4410*	1-117-0232-006	$3,715.00
CaseIH, 4420/3320 2009 & Older (90'-100')*	1-117-0232-075	$3,715.00
CaseIH, 4420/3330 (120') w/Autofold (controller kit included)	1-117-0232-091	$7,165.00
CaseIH 3230/3330/4420, 2010 & Newer, 90' - 100' booms (controller kit included)*	1-117-0232-095	$7,460.00

GVM

GVM Predator 2007	1-117-0232-050	$3,420.00
GVM Predator, 2008 & Newer / Prowler, 2004 & Newer (controller kit included)	1-117-0232-083	$7,165.00

Hagie

Hagie, 284/2100/DTS	1-117-0232-048	$3,715.00
Hagie, STS (2000-2006)	1-117-0232-080	$3,715.00
Hagie, STS (2007-2013)	1-117-0232-116	$7,165.00

Boom Controls

AutoBoom®

CAN UltraGlide

Self-Propelled Kits, CAN UltraGlide

John Deere

***Includes "S" Sensor Bracket Kit (1-117-0131-082).**

John Deere, 4700, 1998 & Older*	1-117-0232-012	$3,715.00
John Deere, 4700 (1999 & Newer)/4710*	1-117-0232-019	$3,715.00
John Deere, 4720/4730/4830*	1-117-0232-020	$3,715.00
John Deere, 4920*	1-117-0232-011	$3,715.00
John Deere, 4930/4940*	1-117-0232-084	$3,715.00
John Deere 4630*	1-117-0232-100	$3,715.00

Miller

Miller Condor Series, Spray-Air Boom	1-117-0232-081	$3,420.00
Miller Condor, A40	1-117-0232-077	$3,420.00
Miller Nitro, 4000 Series (controller kit included)	1-117-0232-082	$7,165.00
Miller Nitro, 2200HT/2275HT/220/200/N2 (controller kit included)	1-117-0232-004	$7,165.00
Miller Nitro, 3000 Series, SN 21.12733 and higher (controller kit included)	1-117-0232-074	$7,165.00
Miller Condor, Monoboom 2010 & Newer (controller kit included)	1-117-0232-094	$7,165.00
Miller Condor Series, Spray-Air Boom, 2010 & Newer (controller kit included)	1-117-0232-093	$7,165.00
Miller Nitro, 3000 Series, SN 21.12732 and lower (controller kit included)	1-117-0232-004	$7,165.00
Miller Nitro, GC Series Mono Boom (controller kit included)	1-117-0232-108	$7,165.00
Miller Nitro N5 Series (controller kit included)	1-117-0232-107	$7,165.00
Miller Condor, GC Series Mono Boom (controller kit included)	1-117-0232-108	$7,165.00
Miller Condor, GC Series Spray Air Boom (controller kit included)	1-117-0232-109	$7,165.00

Miller ISOBus

Miller Nitro N5 Series (ISO controller kit included)	1-117-0232-115	$7,165.00
Miller Condor, GC Series Mono Boom (ISO controller kit included)	1-117-0232-114	$7,165.00
Miller Condor, GC Series Spray Air Boom (ISO controller kit included)	1-117-0232-113	$7,165.00

New Holland

New Holland Guardian Front Boom Series (controller kit included)	1-117-0232-107	$7,165.00
New Holland Guardian Rear Boom Series Mono Boom (controller kit included)	1-117-0232-108	$7,165.00
New Holland Guardian Rear Boom Series Spray Air Boom (controller kit included)	1-117-0232-109	$7,165.00

New Holland ISOBus

New Holland Guardian Front Boom Series (ISO controller kit included)	1-117-0232-115	$7,165.00
New Holland Guardian Rear Boom Series Mono Boom (ISO controller kit included)	1-117-0232-114	$7,165.00
New Holland Guardian Rear Boom Series Spray Air Boom (ISO controller kit included)	1-117-0232-113	$7,165.00

Spra-Coupe

***Includes "S" Sensor Bracket Kit (1-117-0131-082).**

Spra-Coupe 7x50*	1-117-0232-049	$5,230.00
Spra-Coupe 7x60, 2009 & Older*	1-117-0232-086	$3,715.00
Spra-Coupe 7X60, 2010 & Newer (requires node mounting kit 1-117-0171-342 if AccuBoom is not already present)*	1-117-0232-098	$7,460.00

Boom Controls

AutoBoom®

CAN UltraGlide

Self-Propelled Kits, CAN UltraGlide

Willmar

***Includes "S" Sensor Bracket Kit (1-117-0131-082).**

Willmar 6000-7000 Series	1-117-0232-016	$3,420.00
Willmar 8500*	1-117-0232-014	$3,715.00
Willmar 8650, RoGator boom only	1-117-0232-044	$3,715.00

Pull-Type Kits, CAN UltraGlide

NOTE: For all pull-type sprayers, the hydraulic valve in the standard kit is setup for OPEN center operation.

The sprayer hydraulic valve may need to be converted from closed center to open center mode. Contact the machine dealer for assistance.

Bestway

Bestway	1-117-0232-036	$3,420.00
Bestway (2009+/Vride Boom)	1-117-0232-090	$3,420.00

Fast

***Includes "S" Sensor Bracket Kit (1-117-0131-082).**

Fast, 9500/9600, 60' boom*	1-117-0232-023	$3,715.00
Fast 9600 (80'-120')	1-117-0232-096	$3,420.00

Flexicoil

***Includes "S" Sensor Bracket Kit (1-117-0131-082).**

Flexicoil, 67 Series, 2006 & Older, without Windscreen*	1-117-0232-024	$3,715.00
Flexicoil, 67 Series, 2006 & Older, with Windscreen	1-117-0232-041	$3,420.00
Flexicoil, 68 Series/Case SRX, 2007 & Newer, 80', 90', 100' boom	1-117-0232-070	$3,420.00
Flexicoil, 68 Series/Case SRX, 2007 & Newer, 120', 132' boom	1-117-0232-071	$3,420.00

Gregson

Gregson, 2008 & Older, Fasse valve, Live Hydraulics	1-117-0232-031	$3,420.00
Gregson, 1000/1250 HT, 2009 & Newer	1-117-0232-101	$3,420.00

Hardi

***Includes "S" Sensor Bracket Kit (1-117-0131-082).**

Hardi Eagle, HZ boom, 2009 & Newer*	1-117-0232-026	$3,715.00
Hardi Force*	1-117-0232-028	$3,715.00

Miller

Miller Pro	1-117-0232-078	$3,420.00

MS

***Includes "S" Sensor Bracket Kit (1-117-0131-082).**

Condor T1000, Hystar valve, 2009 & Newer*	1-117-0232-102	$3,715.00

Redball

Redball, 555/570/580/655	1-117-0232-035	$3,420.00
Redball, 670/680	1-117-0232-073	$3,420.00
Redball, 690	1-117-0232-066	$3,420.00

Boom Controls

AutoBoom®

CAN UltraGlide

Pull-Type Kits, CAN UltraGlide

Schaben

Schaben 8500, 8650 90' boom and smaller	1-117-0232-034	$3,420.00

Sprayer Specialties

Sprayer Specialties XLRD, 2006 & Older	1-117-0232-054	$3,420.00
Sprayer Specialties XLRD, 2007 & Newer	1-117-0232-089	$3,420.00

Summers

***Includes "S" Sensor Bracket Kit (1-117-0131-082).**

Summers (80', 90', 100')*	1-117-0232-033	$3,715.00
Summers Ultimate NT (120', 132')*	1-117-0232-067	$3,715.00

Top Air

Top Air, ALL MODELS	1-117-0232-059	$3,420.00

CAN Center Sensor Kits

*** 1 side of node is used already**
**** both sides of node are used already**

Kit, Upgrade, Aftermarket, Ultrasonic Sensor, Center Section (3 pin weather pack)*	1-117-0137-032	$830.00
Kit, Upgrade, OEM, Ultrasonic Sensor, Center Section (3 pin weather pack)**	1-117-0137-033	$765.00
Kit, Upgrade, Ultrasonic Sensor, Digital 4 pin Deutch, Center Section	1-117-0137-049	$975.00

Center Rack Control Upgrade Kits

Kit, Upgrade, Center Rack Control, RoGator, Factory Install (2008 & 2009)	1-117-0131-069	$1,335.00
Kit, Upgrade, Center Rack Control, CaseIH, Factory Install	1-117-0131-070	$1,335.00
Kit, Upgrade, Center Rack Control, Generic, Prior Node Rev B	1-117-0131-071	$2,220.00
Kit, Upgrade, Center Rack, Control, Generic; Node Rev B and Higher	1-117-0131-072	$1,335.00

CAN Dual Ultrasonic Sensor Kits

Ultrasonic Sensor Bracket Extension Kit ("S" Type)	1-117-0131-082	$296.00

For Systems With Inner & Outer Sensor Connections

AGCO RoGator	1-117-0137-031	$1,430.00
AGCO RoGator (OEM installed AutoBoom)	1-117-0137-031	$1,430.00
Case IH (OEM Installed AutoBoom)	1-117-0137-026	$1,430.00
Equipment Technologies (Apache)	1-117-0137-031	$1,430.00
Equipment Technologies (OEM installed AutoBoom)	1-117-0137-031	$1,430.00
Fast	1-117-0137-030	$1,430.00
GVM	1-117-0137-031	$1,430.00
John Deere 47x0/48x0	1-117-0137-031	$1,430.00
Miller Nitro (OEM Installed AutoBoom)	1-117-0137-029	$1,430.00
Redball	1-117-0137-031	$1,430.00
Spray-Air Boom (most makes)	1-117-0137-064	$1,400.00
Top Air (OEM installed AutoBoom)	1-117-0137-031	$1,430.00
Top Air	1-117-0137-031	$1,430.00

Boom Controls

AutoBoom®

CAN UltraGlide

CAN Dual Ultrasonic Sensor Kits

For Systems With A Single Node Connection

AGCO RoGator	1-117-0137-031	$1,430.00
Case IH 3320/3330/3230/4260/4410/4420	1-117-0137-046	$1,430.00
Equipment Technologies (Apache)	1-117-0137-031	$1,430.00
Fast	1-117-0137-031	$1,430.00
GVM	1-117-0137-031	$1,430.00
Hagie STS	1-117-0137-035	$1,445.00
John Deere 47x0/48x0	1-117-0137-031	$1,430.00
John Deere 4920/4930	1-117-0137-027	$1,430.00
Miller Nitro	1-117-0137-044	$1,430.00
Redball	1-117-0137-031	$1,430.00
Schaben	1-117-0137-028	$1,430.00
Summers	1-117-0137-028	$1,430.00
Top Air	1-117-0137-031	$1,430.00

Boom Controls

AutoBoom®

CAN UltraGlide

Standard Gauge Wheels (optiol)

AGCO RoGator (90' - 120')	1-117-0133-001	$1,155.00
AGCO RoGator (60' - 80')	1-117-0133-037	$1,155.00
AGCO RoGator 2010+ (90' - 100')	1-117-0133-101	$1,155.00
AGCO RoGator 2010+ (120')	1-117-0133-085	$1,155.00
Apache	1-117-0133-013	$1,155.00
Bestway	1-117-0133-036	$1,155.00
Brandt	1-117-0133-029	$1,155.00
Case IH 3150/3185	1-117-0133-005	$1,155.00
Case IH 4260/4410/3200/3310/3320/3330/3230/4420 (90'-100')	1-117-0133-006	$1,155.00
Case IH 120'	1-117-0133-075	$1,155.00
Fast	1-117-0133-023	$1,155.00
FlexiCoil 67 Series	1-117-0133-024	$1,155.00
Flexicoil 67 Series, with Windscreen	1-117-0133-041	$1,155.00
Flexicoil 68 Series, 2007 & Newer, 80'-100'	1-117-0133-070	$1,155.00
Flexicoil 68 Series, 2007 & Newer, 120'-134'	1-117-0133-071	$1,155.00
Gregson	1-117-0133-031	$1,165.00
GVM 120'	1-117-0133-083	$1,155.00
Hardi Eagle	1-117-0133-026	$1,155.00
Hardi Force	1-117-0133-028	$1,155.00
John Deere 4630	1-117-0133-100	$1,065.00
John Deere 4700/4710	1-117-0133-012	$1,155.00
John Deere 4720/4830	1-117-0133-020	$1,155.00
John Deere 4920/4930	1-117-0133-011	$1,155.00
Miller MD/Condor Series 2009 & Oder	1-117-0133-004	$1,155.00
Miller Nitro (90'-100' only)	1-117-0133-004	$1,155.00
Miller Pro	1-117-0133-078	$1,165.00
Miller Spray-Air Boom	1-117-0133-081	$1,155.00
Red Ball	1-117-0133-035	$1,155.00
Schaben	1-117-0133-034	$1,155.00
Schaben 8650, 120' boom	1-117-0133-104	$1,155.00
Spra-Coupe (7xx0)	1-117-0133-049	$1,155.00
Summers	1-117-0133-033	$1,165.00
Top Air	1-117-0133-055	$1,155.00
Willmar	1-117-0133-014	$1,155.00
Versatile SX275	1-117-0133-097	$1,155.00

Boom Controls

AutoBoom®

Replacement Parts, AutoBoom®

G1 Replacement Parts

Proportional Driver	1-063-0131-101	$422.00
16′ Extension Cable	1-115-0171-526	$490.00
Power Cable	1-115-0171-533	$46.00
37′ G2 Main Harness	1-115-0171-594	$565.00
7′ G2 Main Harness	1-115-0171-597	$840.00
O-Ring	1-219-0001-005	$1.30
On/Off Double Blocker Valve	1-334-0002-061	$205.00
12 VDC Coil	1-334-0003-032	$47.00
Main Pilot Relief Valve	1-334-0003-033	$272.00
3-Way Modulating Valve	1-334-0003-058	$131.00
Pressure Transducer	1-422-0000-081	$287.00

G2 Replacement Parts

Adapter Fitting (Holds Orifice)	1-019-0159-504	$21.00
Right Ultrasonic Assembly	1-063-0130-012	$875.00
Left Ultrasonic Assembly	1-063-0130-014	$875.00
Proportional Driver	1-063-0131-101	$422.00
16′ Extension Cable	1-115-0171-526	$490.00
Power Cable	1-115-0171-533	$46.00
37′ G2 Main Harness	1-115-0171-594	$565.00
Molded Cap	1-118-0159-044	$1.65
One-way orifice disc	1-333-0002-204	$11.00
On/Off Double Blocker Valve	1-334-0002-061	$205.00
12 VDC Coil	1-334-0003-032	$47.00
Main Pilot Relief Valve	1-334-0003-033	$272.00
3-Way Modulating Valve	1-334-0003-058	$131.00
Pressure Transducer	1-422-0000-081	$287.00
Ultrasonic Sensor	1-063-0130-009	$585.00

Boom Controls

AutoBoom®

Replacement Parts, AutoBoom®

PowerGlide / PowerGlide Plus / UltraGlide Replacement Parts

Manual, CAN AutoBoom	1-016-0130-062	$26.00
Manual, ISO CAN Autoboom	1-016-0130-065	$41.00
Orifice Fitting	1-019-0159-504	$21.00
Ultrasonic Sensor	1-063-0130-009	$585.00
Node, CAN AutoBoom PowerGlide Plus	1-063-0130-010	$1,670.00
AutoBoom Controller, PowerGlide	1-063-0130-011	$1,295.00
Ultrasonic Sensor, Right	1-063-0130-012	$875.00
Node, CAN AutoBoom UltraGlide	1-063-0130-013	$2,990.00
Ultrasonic Sensor, Left	1-063-0130-014	$875.00
Node, ISO CAN Autoboom	1-063-0130-016	$2,555.00
Center Ultrasonic Assembly	1-063-0130-018	$875.00
AutoBoom Controller, PowerGlide Plus/UltraGlide	1-063-0130-021	$880.00
Assembled Spring/Shock Abosorber, Cushioned Guage wheel	1-063-0131-148	$87.00
Arm, Ultrasonic Sensor	1-106-0159-626	$25.00
Lower Housing, Ultrasonic Sensor	1-106-0159-627	$20.00
Cover, Ultrasonic Sensor	1-106-0159-628	$20.00
CAN Power Cable, 16’	1-115-0230-007	$390.00
CAN Dual Sensor Cable	1-115-0230-010	$151.00
CAN AutoBoom Cable 37’	1-115-0230-045	$975.00
Kit, Sensor Housing, Molded	1-117-0131-043	$79.00
Kit, Replacement, AutoBoom, Gauge Wheel, Bushings & Pin	1-117-0131-062	$67.00
Kit, Sensor Brackets, Ultrasonic, Pommier	1-117-0131-080	$166.00
Kit, AutoBoom Guage Wheel, Needle Bearnings and Pin	1-117-0131-085	$97.00
Spring, Cushioned Gauge Wheel	1-314-0000-015	$43.00
Shock Absorber, Cushioned Gauge Wheel	1-321-0000-355	$54.00
Spring Retainer, Barrel End	1-321-0000-365	$5.45
Spring Retainer, Rod End	1-321-0000-366	$5.45
Floating Orifice Shim	1-333-0002-203	$15.00
One Way Orifice Disk (.060)	1-333-0002-204	$11.00
One Way Orifice Disk (.0465)	1-333-0002-222	$9.70
High-Pressure In-Line Filter, 120 Micron	1-333-0002-223	$63.00
Plug, -4 SAE O-Ring	1-333-0012-051	$1.80
Plug, -6 SAE O-Ring	1-333-0012-104	$2.70
Plug, -8 SAE O-Ring	1-333-0012-211	$15.00
Plug, -2 SAE O-Ring	1-333-0012-262	$1.15
1/4"-20 Orifice (.060")(Round Coil Valve)	1-333-0012-284	$4.55
Proportional Cartridge (Square Coil Valve)	1-334-0002-069	$398.00
On/Off Double Block Cartridge	1-334-0002-070	$173.00
Manual Proportional Cartridge (Square Coil Valve)	1-334-0002-072	$126.00
Proportional Cartridge (Round Coil Valve)	1-334-0002-106	$207.00
On/Off Double Blocking Cartridge (Round Coil Valve)	1-334-0002-107	$88.00
Sequence Cartridge (Round Coil Valve)	1-334-0002-108	$64.00
Manual Proportional Cartridge (Round Coil Valve)	1-334-0002-110	$88.00
Open Center/LS Plug	1-334-0002-137	$88.00
LS Relief Valve	1-334-0003-074	$111.00
Logic Valve	1-334-0003-075	$149.00
Cable, Analog Sensor Power	1-420-2002-028	$30.00
Pressure Transducer	1-422-0000-086	$184.00

Boom Controls

AutoBoom®

Replacement Parts, AutoBoom®

Open Center Conversion Kits, CAN PowerGlide Plus

Kit, Open Center Conversion, AutoBoom Block (Square Coil Valves Only)	1-117-0131-027	$810.00

Boom Sense or Open Center/LS Coil Cables

Cable, Adapter, Boom Sense, Left Up John Deere 47X0/4830	1-115-0171-254	$78.00
Boom Sense 2-Pin Deutsch (Pin 1 Signal)	1-115-0171-546	$68.00
Boom Sense 2-Pin Weather Pack (Pin A Signal)	1-115-0171-558	$46.00
Boom Sense 2-Pin Weather Pack (Pin B Signal)	1-115-0171-559	$35.00
Boom Sense, Left Up/Down, John Deere 4710	1-115-0171-622	$72.00
Boom Sense, Right Down, John Deere 4710	1-115-0171-623	$72.00
Boom Sense, Right Up, John Deere 4710	1-115-0171-624	$46.00
Boom Sense Down, John Deere 4700, '99 And Earlier	1-115-0171-632	$72.00
Boom Sense Up, John Deere 4700, '99 And Earlier	1-115-0171-633	$72.00
Boom Sense, B-F Polar, John Deere 4920	1-115-0171-674	$71.00
Boom Sense 2-Pin Metripack (Pin B Signal)	1-115-0171-685	$44.00
Boom Sense, A-F Polar, John Deere 4920	1-115-0171-789	$60.00
Boom Sense Weather Pack ("Y")	1-115-0171-790	$35.00
Boom Sense Ring Terminals	1-115-0230-001	$121.00
Boom Sense Metri-Pack (Pin A Signal 150 Series)	1-115-0230-013	$84.00
Boom Sense 2-Pin Metri-Pack (Pin A Signal 280 Series)	1-115-0230-072	$99.00
Boom Sense, 3 Pin DIN, (Pin 2 Signal)	1-115-0230-080	$72.00

Center Rack Control Cables

Center Rack Control Metri-Pack 150 Series (Pin A Signal)	1-115-0230-035	$54.00
Center Rack Control 2-Pin Weather Pack (Pin A Signal/Control)	1-115-0230-037	$102.00
Center Rack Control 2-Pin Deutsch (Pin 1 Signal/Control)	1-115-0230-039	$49.00
Center Rack Control Weather Pack (B-F Polar) John Deere 49X0	1-115-0230-040	$99.00
Center Rack Control Weather Pack (A-F Polar) John Deere 49X0	1-115-0230-041	$99.00
Center Rack Control, Up, JD 4710 and 4700 ('99 and Earlier)	1-115-0230-048	$62.00
Center Rack Control, Down, JD 4710 and 4700 ('99 and Earlier)	1-115-0230-049	$62.00
Center Rack Control Ring Terminal	1-115-0230-065	$53.00
Center Rack Control, 14' Extension	1-115-0230-066	$98.00
Center Rack Control Metri-Pack 280 Series Metri-Pack (Pin A Signal)	1-115-0230-074	$99.00
Center Rack Control, 3 Pin DIN, (Pin 1 Signal/Control)	1-115-0230-077	$99.00
Center Rack Control, 2-Pin Deutsch (Pin 1 Signal/Control) Rev. Sex	1-115-0230-081	$72.00
Center Rack Control 2-Pin Weather Pack (Pin A Signal/Control) Rev. Sex	1-115-0230-087	$72.00

US Sensor Extension Cables

Ultrasonic Sensor 17' Extension	1-115-0171-618	$75.00
Ultrasonic Sensor 30' Extension	1-115-0171-616	$79.00
Ultrasonic Sensor 34' Extension	1-115-0171-636	$117.00
Ultrasonic Sensor 40' Extension	1-115-0171-602	$96.00
Ultrasonic Sensor 42.5' Extension	1-115-0171-615	$93.00
Ultrasonic Sensor 46' Extension	1-115-0171-654	$107.00
Ultrasonic Sensor 50' Extension	1-115-0230-050	$133.00
Ultrasonic Sensor 60' Extension	1-115-0230-051	$151.00
Ultrasonic Sensor 70' Extension	1-115-0171-527	$149.00

Boom Controls

AutoBoom®

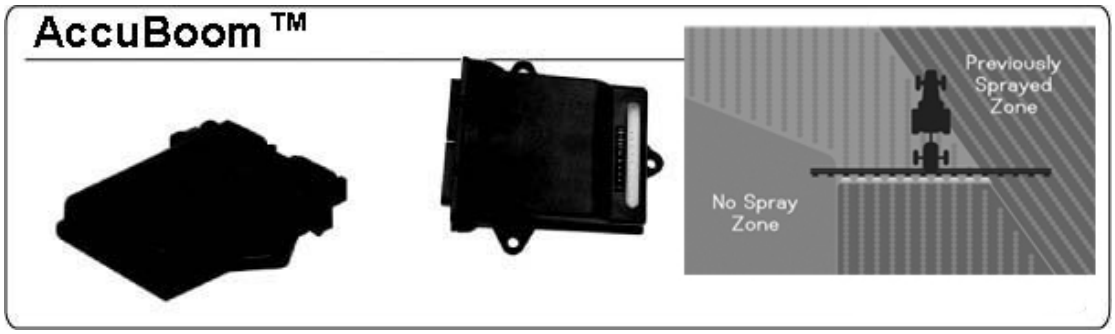
Replacement Parts, AutoBoom®

Update Cables

CAN Node Update	1-115-0230-011	$88.00
CAN Node Power	1-115-0230-071	$56.00
Cable, Update, Ultrasonic Sensor	1-115-0171-755	$77.00

Boom Controls

AccuBoom™



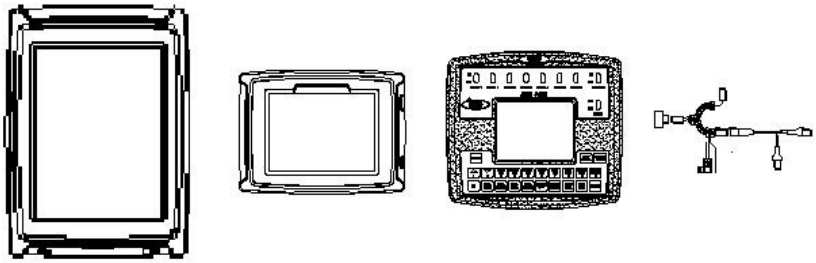
AccuBoom™ is designed as an add-on kit for a wide range of sprayers and certain floaters. It requires a Viper™, Viper Pro™, Envizio Plus™, Envizio Pro II ® or Cruizer II™ to also be installed. All AccuBoom™ setup and operation is accessed through the Raven touch-screen console. The Raven touch screen consoles will also display and data-log boom sections as they turn off and on throughout the field. AccuBoom™ kits have customized cables to allow easy installation with minimal effort and hassle. All kits have been designed using actual machines. This means cables will be the right length and will have the correct connections for your application. It also means you must make sure you have correctly identified the make and model of your sprayer or spreader to avoid issues with incorrect cables. Raven AccuBoom™ kits provide automatic boom section control for sprayers and spreaders. Raven is the only manufacturer to offer this level of customized kits for sprayers and floaters.

AccuBoom™ systems require the use of a 4 Hz or faster receiver. Using a 1 Hz receiver is not recommended.

Boom Controls

AccuBoom™

How to order AccuBoom™ with GEN I Cabling



1. **Order an AccuBoom™ node kit with or without remote**
2. **Note what type of control system is installed:**

AccuBoom Configuration Matrix					
	AccuBoom Control Console				
Rate Control Console		Cruizer II	Envizio Pro	Viper	Viper Pro
	440	Serial	Serial	Serial	Serial
	450	Serial	Serial	Serial	Serial
	460	Serial	Serial	Serial	Serial
	660	Serial	Serial	Serial	Serial
	661	Serial	Serial	Serial	Serial
	750	Serial	Serial	Serial	Serial
	4000	-	CAN	-	CAN
	4400	CAN	CAN	Serial	Serial/CAN
	4600	CAN	CAN	Serial	Serial/CAN
	5000	-	CAN	-	CAN
	CAN Product Control		CAN	CAN	CAN

3. **Find make and model of the machine from parts list.**
4. **Match control kit in machine to parts description.**
5. **Add Raven touch-screen console and DGPS receiver if not already installed in machine:**
   - Viper Pro™ + GPS
   - Envizio Pro II ® + GPS

6. Order CAN power tee kit (if currently using a non-CANBUS system):

- Example – SCS 440™ or SCS 460™-equipped sprayer would require a power/terminator kit.
- Example – a Viper™ CANBUS-equipped sprayer would not require the additional kit because it already is setup as a CANBUS controlled applicator.

Note: All "Serial" product control kits

- Boom switches must be in the OFF position during AccuBoom™ operation
- Manual override of individual boom sections to OFF must be done using the AccuBoom™ control console.

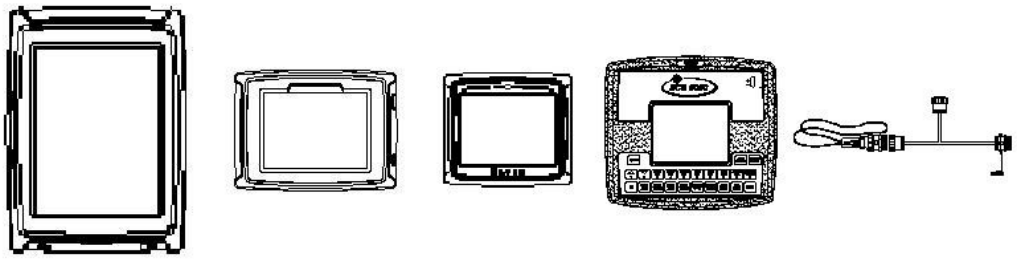
Note: All CAN product control kits

- Manual override of individual boom sections to ON must be done using the AccuBoom™ control console.

Boom Controls

AccuBoom™

How to order AccuBoom™ with GEN II Cabling



1. **Order an AccuBoom™ node kit with or without remote**
2. **Note what type of control system is installed:**
3. **Add Raven touch screen console and DGPS receiver if not already installed in machine:**

    - Envizio Pro II ® + GPS (exclude if internal GPS)
    - Cruizer II™ + GPS (exclude if internal GPS)

Note: All "Serial" product control kits

- Boom switches must be in the OFF position during AccuBoom™ operation
- Manual override of individual boom sections to OFF must be done using the AccuBoom™ control console.

Note: All CAN product control kits

- Manual override of individual boom sections to ON must be done using the AccuBoom™ control console.

Boom Controls

AccuBoom™

Node Control Kits

AccuBoom Control Node	1-063-0172-316	$905.00
Kit, AccuBoom Control Node w/ Remote Section Control	1-117-0171-284	$1,520.00

Remote Section Control

AccuBoom Node must be Rev C or higher.

Kit, Remote Section Control (Buy 5, Get 1 FREE; countertop display included)	1-117-0171-221	$4,965.00
Kit, Remote Section Control (Single)	1-117-0171-224	$995.00

Self-Propelled Kits, AccuBoom™

Note: Requires AccuBoom Node Kit

AGCO

Serial

AGCO, RoGator, 554/854	1-117-1004-039	$485.00
AGCO, RoGator, 1254	1-117-1004-025	$485.00
AGCO, RoGator, 864/1064/1264/874/1074/1274(C), 2006 & Older	1-117-1004-026	$485.00

CAN

***Requires AccuBoom Combo Node (1-063-0172-714)**

AGCO, RoGator, 854	1-117-1004-006	$485.00
AGCO, RoGator, 1254C/1254	1-117-1004-008	$485.00
AGCO, RoGator, 864/1064/1264/874/1074/1274(C), 2006 & Older	1-117-1004-010	$485.00
AGCO, RoGator, 874/1074/SS/SS874/SS1074/SS884/SS1084/1286C, 2007-2008	1-117-1004-022	$485.00
AGCO, TerraGator, 2004-2008, (liquid only)	1-117-1004-044	$485.00
AGCO, Rogator Liquid/AirMax 180, 884/SS884/1084/SSc1084/1286C/984/984H/994/994H/1194/1194H/1184/1184H/ 1386/1396, 2009-2011*	1-117-1004-063	$660.00
AGCO, TerraGator Liquid/AirMax/AirSpread, 6203/6303/7300/8203/8204/8244/8300/8303/8304/8400/9203/9205/9300, 2009-2011*	1-117-1004-071	$660.00

CaseIH

Serial

CaseIH, SPX, 3150/3185/3200/3200B/4260 (Patriot Cabs), with/without AIM	1-117-1004-030	$485.00
CaseIH, SPX, 4260(2001+)/3310/4410, with/without AIM	1-117-1004-039	$485.00

Boom Controls

AccuBoom™

Self-Propelled Kits, AccuBoom™

CaseIH

CAN

***Requires 115-0171-753 Cable if CAN Product Control Console is an SCS 4600**

CaseIH, SPX, 3150/3185(-2003)/3200(-2003)/3200B/4260 (-2000), without AIM	1-117-1004-020	$485.00
CaseIH, SPX, 3310, without AIM *	1-117-1004-001	$485.00
CaseIH, SPX, 3310, with AIM *	1-117-1004-002	$660.00
CaseIH, SPX, 4410, without AIM *	1-117-1004-003	$485.00
CaseIH, SPX, 4410, with AIM *	1-117-1004-004	$660.00
CaseIH, SPX, 3230/3320/4420, 2007-2008, with/without AIM	1-117-1004-023	$485.00
CaseIH, SPX, 4260, 2001 & Newer, without AIM	1-117-1004-047	$485.00
CaseIH, FLX, 10 Series, liquid only	1-117-1004-049	$1,180.00
CaseIH, FLX, 20/30 Series, liquid only	1-117-1004-023	$485.00
CaseIH, SPX, 3185/3200, 2004 & Newer, with AIM	1-117-1004-066	$485.00
CaseIH, SPX, 3150/3185(-2003)/3200(-2003)/3200B/4260(-2000), with AIM	1-117-1004-068	$485.00
CaseIH, SPX, 4260, 2001 & Newer, with AIM, new cab	1-117-1004-069	$485.00
CaseIH, SPX, 3185/3200, 2004 & Newer, without AIM	1-117-1004-070	$485.00
CaseIH, SPX, 3320/4420/3230/3330/4430 2009 & Newer	1-117-1004-082	$485.00

Equipment Technologies

Serial

Apache, AS500/AS710/AS850/AS1000/AS1010/AS1200/AS1210, 2008 & Older	1-117-1004-039	$485.00

CAN

***Requires ET part number 700000462 for 2006 and older models with an SCS 4400**

Apache, AS500/AS710/AS850/AS1000/AS1010/AS1200/AS1210, 2008 & Older*	1-117-1004-040	$660.00

GVM

Serial

GVM, Predator/Prowler, 2009 & Older, liquid	1-117-1004-039	$485.00

CAN

GVM, Predator/Prowler, 2009 & Older, liquid	1-117-1004-014	$485.00
GVM, Predator/Prowler, 2010-2011, liquid	1-117-1004-072	$485.00

Hagie

Note: Standard 1-117-1004-039 kit for the SCS 460 console will not work with DTS or STS series

Serial

Hagie, DTS8	1-117-1004-039	$485.00
Hagie, DTS10/2100/2101 (SCS460)	1-117-1004-042	$660.00
Hagie, STS10/STS12/STS14/STS16 (SCS 4600)	1-117-1004-064	$1,000.00

CAN

Hagie, STS10/STS12/STS14/STS16 (2000-2004, 2006-2009)	1-117-1004-017	$358.00
Hagie, STS10/STS12/STS14/STS16 (2010-2011)	1-117-1004-079	$358.00
Hagie, DTS10/2100/2101	1-117-1004-083	$358.00

Boom Controls

AccuBoom™

Self-Propelled Kits, AccuBoom™

John Deere

John Deere rate control only

John Deere, 4700/4710/4720/4730/4920/4830/4930	1-117-1004-051	$446.00

Miller

Serial

Miller, SilverWheels (Liquid)	1-117-1004-039	$485.00
Millller, 3004/3304/3654 Atlas (Liquid)	1-117-1004-039	$485.00
Miller, Nitro, 200/275/2200T/2200HT/2200TET/2275HT/N2/N2XP/3200/3275/4215/4215HT/4240/4240HT/4275/4315/4333/4365	1-117-1004-039	$485.00
Miller, MD 1000/1200	1-117-1004-039	$485.00
Miller, Condor, A40/A75 (2007-2009)	1-117-1004-039	$485.00

CAN

Miller, Nitro, N2XP/3200T/3200T ET/3200HT/4215/4240/4275/4315/4333/4365	1-117-1004-015	$485.00
Miller, MD 1000/1200 (2007-2009)	1-117-1004-053	$555.00
Miller, Condor, A40/A75 (2007-2009)	1-117-1004-053	$555.00
Miller, Condor, G40/G75 (2010-2011)	1-117-1004-076	$555.00

New Holland

Serial

New Holland, Guardian F, SP 215, 240, 275, 333, 365	1-117-1004-039	$485.00

CAN

New Holland, Guardian F, SP 215, 240, 275, 333, 365	1-117-1004-015	$485.00
New Holland, Guardian R, SP 240, 275	1-117-1004-076	$555.00

Redball

CAN

Redball, 7830	1-117-1004-065	$555.00

Spray-Air

CAN

Spray-Air, 2010 Predator	1-117-1004-050	$446.00

Spra-Coupe

Serial

Spra-Coupe, 3000/4000 Series	1-117-1004-028	$975.00

CAN

***Requires AccuBoom combo node (063-0172-714) and node mounting kit (117-0171-342)**

Spra-Coupe, 7450/7650/7655/7460/7660, 2009 & Older	1-117-1004-012	$485.00
Spra-Coupe, 7460/7660 (2010-2011)*	1-117-1004-077	$660.00

Boom Controls

AccuBoom™

Standard Pull Type Sprayers

Serial

7 Sections (SCS 440/450/460/660)	1-117-1004-039	$485.00

CAN

7 Sections (SCS 4400)	1-117-1004-040	$660.00

Generic Kits

Serial

10 Section Universal	1-117-1004-073	$660.00

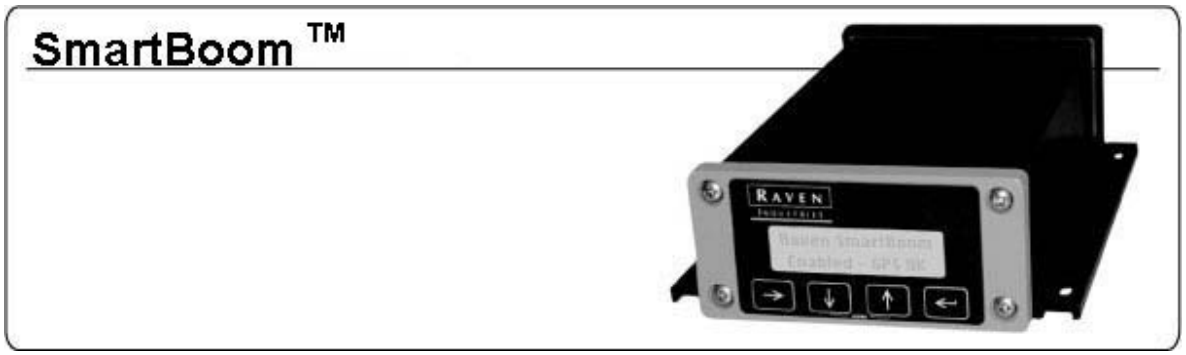
CAN

10 Section Universal (3-wire boom valves)	1-117-1004-081	$660.00
10 Section Universal	1-117-1004-073	$660.00

Boom Controls

SmartBoom™

How to Order SmartBoom™ Kits



SmartBoom™
SmartBoom™ is a stand-alone boom section control kit that offers a low-cost alternative to an AccuBoom™ system. It has an LCD display along with push buttons for setup and operation. SmartBoom™ is designed to be used with Raven consoles (SCS 440™, SCS 450™, SCS 460™, SCS 660™, SCS 660M™ and a few other specific machines). Raven SmartBoom™ kits provide automatic boom section control for sprayers and spreaders. It is a true "plug and play" installation with no need to splice or crimp wire connections. SmartBoom™ is an ideal product for customers that already own a Raven console as well as any manufacturers' light bar or guidance product. The only requirement is that the light bar or guidance system must have an available DGPS output connection. All Raven sub-meter DGPS receivers come standard with two outputs.

SmartBoom™ systems require the use of a 4 Hz or faster receiver. Using a 1 Hz receiver is not recommended.

How to order a SmartBoom™ kit:

1. Determine if the sprayer is equipped with a Raven console:
- SCS 440™
- SCS 450™
- SCS 460™
- SCS 660™
- SCS 660M™

2. Order SmartBoom™ kit (9-117-1001-043) if compatible console is used

3. Select and order DGPS receiver (if not already installed on machine):
- Phoenix 200™ WAAS (sub-meter)
- Phoenix 200™ WAAS/e-Dif (sub-meter)
- Phoenix 300™ WAAS/CDGPS/OmniStar VBS (sub-meter)
- Phoenix 300™ OmniStar XP/HP (decimeter)
- Invicta 210™ WAAS/Coast Guard Beacon (sub-meter)

Boom Controls

SmartBoom™

NOTE:
-Boom switches are in the OFF position during SmartBoom operation.
-Cannot manually override individual boom sections OFF using boom switches, must be done using SmartBoom console.

***Standard 1-115-1001-001 kit for SCS 460 and 1-115-1001-025 kit for SCS 4600 will not work for DTS/STS/2100/2101 Hagie Sprayers.**

Controller Kit

Kit, SmartBoom Controller	1-117-0171-256	$1,740.00

Cable Kits

Standard

***If CAN SmarTrax or SmartSteer is used**

Cable Kit, SmartBoom, SCS 440/450/460/660	1-115-1001-001	$464.00
Cable Kit, SmartBoom, SCS 4400/4600	1-115-1001-025	$464.00

AGCO

***Requires 5 Channel H-bridge (1-063-0172-753)**

Cable Kit, 3000/4000 Series Spra-Coupe (SCS 460 Console)*	1-115-1001-027	$464.00
5 Channel H-bridge	1-063-0172-753	$414.00
Cable Kit, 864/1064/874/1074 RoGator (January 2006 & Newer)	1-115-1001-029	$464.00
Cable Kit, 864/1064/874/1074 RoGator (December 2005 & Older)	1-115-1001-030	$464.00
Cable Kit, SS874/SS1074/1274C(2007 & Newer)/1286C RoGator	1-115-1001-031	$464.00
Cable Kit, 1254/1264/1274C(2006 & Older) RoGator	1-115-1001-032	$464.00
Cable Kit, 7000 Series Spra-Coupe	1-115-1001-033	$464.00

CaseIH

Cable Kit, 3150/3185/3200/3200B/4260 (Patriot Cabs)	1-115-1001-034	$464.00

John Deere

Cable Kit, 4700/4710/4720/4730/4830/4930	1-115-1001-026	$464.00

Tee Jet

Cable Kit, 844-E/854 TeeJet Console	1-115-1001-028	$535.00

Universal

Cable Kit, 10 Section Universal	1-115-1001-039	$454.00

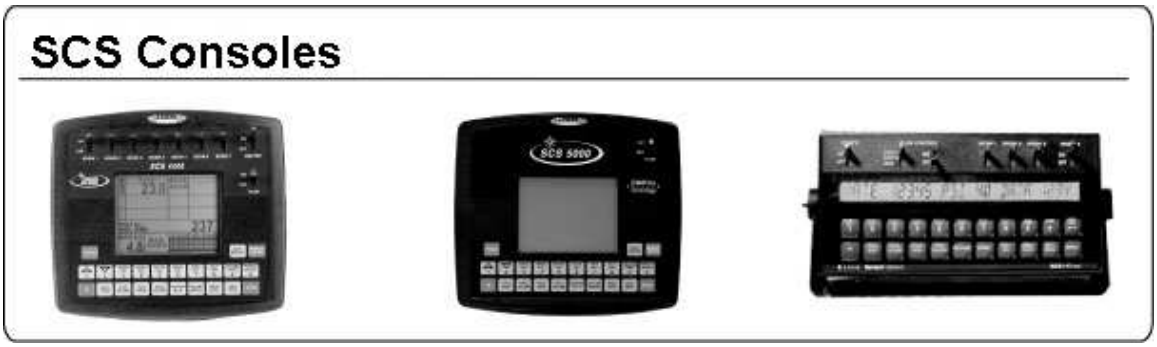
Interface Cables

***If CAN SmarTrax or SmartSteer is used**

Cable, Interface Cruizer w/ Speed	1-115-0171-835	$129.00
Cable, Port Expander Cruizer w/ Speed*	1-115-0171-862	$198.00

Application Controls

SCS Consoles



*** Does not include bracket (107-0171-415).**

SCS 4400™

SCS 4400 Console*	1-063-0173-466	$1,675.00
SCS 4400 Kit (Includes console and bracket)	1-117-0159-924	$1,690.00

SCS 4600™

SCS 4600 Console*	1-063-0173-477	$1,630.00
SCS 4600 Kit (Includes console and bracket)	1-117-0159-926	$1,650.00

Cables, SCS 4400/4600

Console Cable, 3', SCS 4400	1-115-0171-299	$387.00
Console Cable, 20', SCS 4400	1-115-0171-300	$487.00
Console Cable, SCS 4400 Liquid Only, Gen II	1-115-0172-003	$1,240.00
Console Cable, SCS 4400 Liquid Only to 16 pin Amp (440/450) Gen II	1-115-0172-007	$1,095.00
Console Cable, 3', SCS 4600	1-115-0171-317	$440.00
Console Cable, 20', SCS 4600	1-115-0171-318	$439.00
Boom/Power Cable, 6', SCS 4600	1-115-0171-417	$99.00
Product Cable, 12', 5 Boom Liquid, SCS 4400/4600	1-115-0171-315	$254.00
Product Cable, 24', 5 Boom Liquid, SCS 4400/4600	1-115-0171-316	$308.00
Product Cable, 12', 10 Boom Liquid, SCS 4400/4600	1-115-0171-313	$358.00
Product Cable, 24', 10 Boom Liquid, SCS 4400/4600	1-115-0171-314	$440.00
Product Cable, 21', Granular, SCS 4400/4600	1-115-0171-365	$330.00
Extension Cable, 5', SCS 4400/4600	1-115-0171-418	$373.00
Extension Cable, 12', SCS 4400/4600	1-115-0171-319	$384.00
Extension Cable, 24', SCS 4400/4600	1-115-0171-320	$394.00
Adapter Cable, SCS 4X00 to 4X0/6X0	1-115-0171-414	$287.00
Cable, Product Controller, ISO, 37 pin, John Deere	1-115-0172-079	$735.00

SCS 5000™

SCS 5000 Console*	1-063-0172-894	$1,085.00
Console Cable, 3', 4000/5000 (GEN I)	1-115-0171-334	$177.00
Console Cable, SCS 5000 Chassis Interface (GEN II)	1-115-0171-959	$326.00

SCS 4070™

SCS 4070 Console*	1-063-0172-913	$1,510.00
Console Cable, SCS 4070 Chassis Interface (GEN II)	1-115-0171-995	$325.00

SCS 440™

SCS 440 Console(3-Boom)	1-063-0171-183	$1,175.00

Application Controls

SCS Consoles

SCS 450/460™

SCS 450 Console (6-Boom)	1-063-0171-220	$1,350.00
SCS 460 Console (7-Boom)	1-063-0171-249	$1,175.00
SCS 460 Console (7-Boom) w/ Boom indicator lights	1-063-0171-704	$1,300.00

SCS 660™

SCS 660 Console w/ Master Switch	1-063-0172-542	$1,520.00
SCS 660 Liquid/Granular Control Console (7-Boom Liq/Gran)	1-063-0171-221	$1,450.00

Cables, SCS 440/450/460/660™

Console Cable, 3', 450/460 or 660 (p/n 063-0172-542)	1-115-0159-707	$202.00
Console Cable, 3', 460/660	1-115-0159-786	$244.00
Console Cable, 10', Turf, 440	1-115-0159-509	$243.00
Console Cable, 10', 440/450	1-115-0171-085	$199.00
Flow Cable, 6', spade terminals, 440/450	1-115-0159-495	$118.00
Flow Cable, 6', 3 Boom, 3 pin weather pack, Raven boom valve, 440	1-115-0159-858	$151.00
Flow Cable, 6', 6 Boom, 3 pin weather pack, Raven boom valve, 440/450	1-115-0171-086	$207.00
Flow Cable, 12', 3 Boom, 3 pin weather pack, Raven boom valve, 440	1-115-0171-055	$193.00
Flow Cable, 12', 3 Boom, spade terminals, 440	1-115-0159-859	$156.00
Flow Cable, 12', 6 Boom, 3 pin weather pack, Raven boom valve, 440/450	1-115-0171-129	$224.00
Flow Cable, 12', spade terminals, 440/450	1-115-0159-496	$156.00
Flow Cable, 21', granular application, 660	1-115-0159-787	$298.00
Flow Cable, 24', 3 pin weather pack, Raven boom valve, 460/660	1-115-0171-206	$335.00
Flow Cable, 24', spade terminals, 450/460/660	1-115-0159-708	$279.00
Boom/Power Cable, 6', 460/660	1-115-0159-839	$123.00
Product Cable, 12', 7 Boom, 3 pin weather pack, Raven boom valve, 450/460/660	1-115-0171-302	$279.00
Extension Cable, 24', 7 Boom, 440/450	1-115-0159-857	$205.00
Extension Cable, 12', 7 Boom, 440/450	1-115-0159-856	$186.00
Extension Cable, 12', 460/660	1-115-0171-301	$210.00
Extension Cable, 24', 460/660	1-115-0159-717	$314.00
Console Cable, 10', older style, 440	1-115-0159-418	$183.00
Flow Cable, 6', older style, 440	1-115-0159-404	$117.00
Flow Cable, 12', older style, 440	1-115-0159-405	$145.00
Extension Cable, 12', older style, 440	1-115-0159-409	$132.00
Extension Cable, 24', older style, 440	1-115-0159-414	$161.00

SCS 11™

SCS 11 Console	1-070-0159-011	$256.00
SCS 103 Console 3bm & Master	1-070-0159-103	$235.00

SCS 203™

SCS 203 Console	1-063-0159-203	$186.00
6' Cable	1-115-0159-013	$63.00
12' Cable	1-115-0159-015	$79.00
12' Extension Cable	1-107-0159-025	$72.00

SCS 223™

SCS223 Console Liquid Filled Gauge	1-063-0159-223	$202.00

Application Controls

SCS Consoles

SCS 330™

SCS 330 Console (3-Boom)	1-063-0171-115	$780.00
19' External Cable, 330/340	1-115-0159-437	$261.00
32' External Cable, 330/340	1-115-0159-706	$335.00

Pressure Transducer

Pressure Transducer	1-422-0000-090	$272.00
Console Cable 3'	1-115-0171-153	$64.00
Console Cable 10'	1-115-0171-152	$80.00
Console Cable 30'	1-115-0171-176	$89.00
Extension Cable 6'	1-115-0159-016	$58.00
Extension Cable 12'	1-115-0159-017	$62.00
Extension Cable 24'	1-115-0159-019	$75.00
Sensor Cable 6'	1-115-0171-235	$65.00
Sensor Cable 12'	1-115-0171-151	$71.00
Sensor Cable 37'	1-115-0171-224	$110.00
Sensor Cable 44'	1-115-0171-296	$115.00

CAN Nodes

Node, CAN, Boom Sense/Speed	1-063-0172-272	$265.00
Node, CAN, Granular Dual Product Control	1-063-0172-315	$1,135.00
Node, AccuBoom	1-063-0172-316	$905.00
Node, CAN, Single Product Control	1-063-0173-304	$730.00
CAN Motor Control	1-063-0172-360	$965.00
Terminator, CAN, Passive	1-063-0172-369	$106.00
CAN Motor Control, with agitator control capability	1-063-0172-479	$985.00

Single Product Node Cables (GEN II)

Cable Control, Liquid, Single Product Node	1-115-0171-993	$358.00
Cable Control, Granular, Single Product Node	1-115-0171-994	$468.00

Application Controls

CAN Components & Cabling

GEN I

100A Relay	1-063-0159-929	$103.00
CAN Diagnostic Tool	1-063-0172-602	$188.00
Fan Sensor Extension Cable	1-115-0171-070	$40.00
Cable, 21', 10 Boom CAN Systems	1-115-0171-213	$255.00
Cable, 6', CANBUS (includes "T")	1-115-0171-326	$161.00
Cable, Interface, CAN Boom Sense/Speed Node to 10 Boom Switchbox	1-115-0171-337	$97.00
Cable, CAN Boom Sense/Speed Node, CAN/Speed 5 Volts	1-115-0171-345	$106.00
Cable, 12' CANBUS (includes "T")	1-115-0171-362	$169.00
Cable, 24' CANBUS (includes "T")	1-115-0171-363	$183.00
Cable, Adapter "T", CANBUS (use for multiple nodes mounted in same location)	1-115-0171-364	$66.00
Cable, Adapter Tee w/Power, CANBUS	1-115-0171-368	$100.00
Cable, Adapter Tee, Panel Mount	1-115-0171-379	$132.00
Cable, CAN Single Product Control, Liquid	1-115-0171-380	$335.00
Cable, CAN Single Product Control Node, Granular	1-115-0171-381	$438.00
Cable, Dual Product Control Node, Product 1, Granular	1-115-0171-382	$358.00
Cable, CAN Single Product Control, Liquid, 2 Pressure	1-115-0171-384	$365.00
Cable, 6', CANBUS, Extension ("T" not included)	1-115-0171-385	$75.00
Cable, 12', CANBUS, Extension ("T" not included)	1-115-0171-386	$79.00
Cable, 24', CANBUS, Extension ("T" not included)	1-115-0171-387	$80.00
Null Modem Cable (Needed for SCS 4000/5000 series software upgrade)	1-115-0171-395	$24.00
Cable, CAN Dual Product Control Node, Product 2, Spinner	1-115-0171-400	$121.00
Cable, CAN Boom Sense/Speed Node to 10 Boom Switchbox/12V Rdr	1-115-0171-405	$194.00
Cable, 2' Power, Bulkhead End	1-115-0171-412	$85.00
Cable, 16' Power, Plug End	1-115-0171-413	$117.00
Cable, 6' Boom Sense 4000/Viper	1-115-0171-419	$75.00
Cable, 35' Power CAN Motor Control	1-115-0171-582	$256.00
Cable, 18' CANBUS (includes "T")	1-115-0171-690	$177.00
Cable, Single Product Control Node, Spinner Control	1-115-0171-700	$420.00
40A Relay	1-415-1001-009	$8.70
Kit, CAN Power Tee/Terminator	1-117-0159-923	$194.00
Kit, Motor Control CAN w/ Agit and Power Cable	9-117-0171-029	$1,060.00
Kit, Motor Control CAN w/out Agit and Power Cable	1-117-0171-030	$1,060.00
Cable, CAN Single Product Liquid, Bin Level	1-115-0171-626	$365.00

Application Controls

ISO Product Control

Kits, ISO Product Control

Note: ISO systems have been tested and approved for use with GS2 2600 and 2630.
***An ISOBUS hitch cable and product control cables are needed to complete these kits.**
****An ISOBUS hitch cable is needed to complete these kits.**

Kit, ISO single product, liquid/granular to 16 pin product cable*	1-117-6100-001	$1,610.00
Kit, ISO single product, liquid/granular to 37 pin product cable*	1-117-6100-002	$1,670.00
Kit, ISO single product, liquid/granular to 22 pin cable*	1-117-6100-003	$1,750.00
Kit, ISO AccuFlow HP, 3 section**	1-117-6300-001	$1,955.00
Kit, ISO AccuFlow HP, 6 section**	1-117-6300-002	$2,090.00

Kits, Raven ISOBUS Switch Box

Kit, Raven ISOBUS Switchbox, 6 Section Switches, to Raven ISOBUS VT Touchscreen	1-117-6020-001	$510.00
Kit, Raven ISOBUS Switchbox, 6 Section Switches to John Deere GS3	1-117-6020-002	$615.00

ISOBUS Hitch Cables

Cable, ISOBUS hitch to Raven ECU, 12′	1-115-0171-974	$394.00
Cable, ISOBUS hitch to Raven ISO ECU, 14′	1-115-0171-988	$350.00
Cable, ISOBUS hitch to Raven ISO ECU, 22′	1-115-0171-989	$472.00
Cable, ISOBUS hitch to Raven ECU, 36′	1-115-0171-975	$510.00
Cable, ISOBUS hitch to Raven ISO ECU, 45′	1-115-0171-990	$550.00
Cable ISOBUS hitch to Raven ECU, 17′	1-115-0172-034	$412.00

Components, ISO Product Control

Manual, ISOBUS Product Control	1-016-0171-362	$26.00
Cable, Raven ISO/Power w/IBBC Connector	1-115-7300-021	$665.00
Terminator, Powell ISO	1-063-0172-964	$111.00
Node, ISOBUS Product Controller ECU	1-063-0173-006	$1,270.00
Foot Switch, ISO Product Controller	1-063-0173-080	$150.00
Cable Adapter, ISO Powell terminator	1-115-0171-963	$78.00
Cable, switch cab, 8′	1-115-0171-865	$142.00
Cable, ISO tee extension, 12"	1-115-0171-960	$316.00
Cable, ISO tee extension, 6′	1-115-0171-961	$349.00
Cable, ISO tee extension, 12′	1-115-0171-931	$403.00
Cable, ISO tee extension, 24′	1-115-0171-932	$478.00
Cable, ISO tee extension, 36′	1-115-0171-933	$555.00
Cable, ECU adapter, ISO Deere	1-115-0171-958	$444.00
Cable, ISO/CAN AccuFlow HP, 3 section	1-115-0171-946	$665.00
Cable, ISO/CAN AccuFlow HP, 6 section	1-115-0171-947	$850.00
Cable Adapter, 37 pin to 22 pin	1-115-0171-864	$219.00
Cable, product control, main ISO node, 37 pin	1-115-0171-945	$488.00
Cable, product control, main ISO node, 16 pin	1-115-0171-949	$394.00
Cable ext 20′ Proximity Sensor	1-115-0171-501	$97.00
Kit Proximity Sensor & Bracket Mag Mnt	1-117-0171-298	$133.00
Cable ISO tee extensioon 17′	1-115-0172-035	$429.00
Cable Adapter, GEN I Cabling to GEN II Components (30 amp max)	1-115-0172-052	$275.00
Cable, Single Product Node to 37 Pin Product Cable (GEN II)	1-115-0172-053	$485.00
Kit, USB to CAN Update	1-117-0171-464	$565.00
Cable, ISO John Deere Extension, 6′	1-115-0172-093	$187.00
Cable, ISO John Deere Extension, 12′	1-115-0172-094	$214.00
Cable, ISO John Deere Extension, 24′	1-115-0172-095	$256.00

Application Controls

RFM Flow Meters

*** Needs adapter cable 1-115-0171-750 for Raven control connections or adapter cable 1-115-0171-751 for Case IH control connections**

RFM 5 Flowmeter (.1 - 5 GPM), SS	1-063-0173-448	$1,835.00
RFM 15 (.3-15 GPM Poly) M200 Flanged	1-063-0172-040	$292.00
RFM 60S, 1-60 GPM, SS, NH3	1-063-0171-666	$630.00
RFM 60SG, 1-60 GPM, SS, NH3 (Vortex)	1-063-0173-618	$660.00
RFM 60P (1-60 GPM Poly) M200 Flanged	1-063-0171-793	$399.00
RFM 100 (5-100 GPM Poly) M220 Flanged	1-063-0171-066	$645.00
RFM 200 Flow Meter (15-200 GPM Cast)	1-063-0159-574	$990.00
RFM 200P (15-200 GPM Poly) M300 Flanged	1-063-0159-751	$980.00
3" Magmeter Assembly (22-955 GPM)	1-063-0173-148	$5,570.00
4" Magmeter Assembly (35-1493 GPM)	1-063-0173-149	$5,570.00
6" Magmeter Assembly (70-3000 GPM)	1-063-0173-150	$6,490.00
RFM 15 (.5 to 15 GPM), NH3, SS	1-063-0173-373	$640.00

Granular Encoder

Granular Encoder (180 CPR), 50 RPM Max	1-063-0171-071	$267.00
Granular Encoder (36 CPR) 250 RPM max	1-063-0171-114	$267.00
Granular Encoder (180 CPR) 50 RPM max, 25' Cable	1-063-0171-443	$287.00

Granular Options

Shaft Fault Sensor Kit	1-117-0159-484	$88.00
Bin Level Sensor Kit	1-117-0159-640	$230.00
Fan RPM Sensor Kit	1-117-0159-575	$107.00
Kit Bin Level Snsr & 102" cable	1-117-0171-242	$260.00
D.J. Shaft Sensor Adaptor Cable (Amp)	1-063-0159-881	$226.00
D.J. Shaft Sensor Adaptor Cable (Weather Pack)	1-063-0159-997	$195.00
Sensor Gear Tooth Raven Flow	1-063-0159-981	$81.00
New Leader Sensor Adapter Cable	1-115-0171-277	$199.00
Fan Sensor Extension Cable	1-115-0171-070	$40.00

Application Controls

Valve Products

Control Valves

Control Valve, 1/4", SS, NH3 Ball	1-063-0172-173	$447.00
Control Valve, 1", 400 PSI, SS, NH3 Ball	1-063-0172-977	$480.00
Control Valve, 1", 400 PSI, SS, NH3 Ball, Fast Motor	1-063-0172-979	$550.00
Control Valve, 1 1/2", 175 PSI, Poly, Butterfly	1-063-0171-894	$292.00
Control Valve, 3/4", Poly, Butterfly	1-063-0171-120	$161.00
Control Valve, 1", Poly, Flanged Butterfly	1-063-0172-125	$262.00
Control Valve, 1 1/2", Poly, 90 Deg Threaded Flanged Butterfly, Packard	1-063-0171-896	$292.00
Control Valve, 2", SS, Butterfly	1-063-0172-177	$665.00
Control Valve, 2", SS, Butterfly, Fast Motor	1-063-0172-363	$745.00
Control Valve, 3", SS, Butterfly	1-063-0172-181	$1,215.00
Control Valve, 3/4", SS, Ball, Fast Motor	1-063-0172-265	$670.00
Control Valve, 1", 3-Way Ball, Fast Motor	1-063-0172-172	$725.00
Control Valve, 1", Poly, SS Ball	1-063-0172-165	$321.00
Control Valve, 3/4", SS, Ball	1-063-0172-175	$495.00
Contro Valve, 1 1/4", SS, NPT, NH3	1-063-0173-202	$525.00
Control Valve, Fast, 1 1/4", SS, NPT, NH3	1-063-0173-204	$580.00
Control Valve, Fast, 1/4", NH3, SS	1-063-0173-374	$530.00
Control Valve, Fast, 1 1/2" SS, NPT, NH3	1-063-0173-626	$805.00
Control Valve, 1 1/2" SS, NPT, NH3	1-063-0173-667	$765.00

On/Off Valves

On/Off Valve, 1/4", SS, NH3 Ball	1-063-0172-174	$442.00
On/Off Valve, 1", SS, NH3 Ball	1-063-0172-978	$475.00
On/Off Valve, 3/4", SS, Ball (NOT rated for NH3)	1-063-0172-176	$505.00
On/Off Valve, 1 1/2", 100 PSI, Poly, Banjo Ball	1-063-0172-184	$477.00
On/Off Valve, 2" (1 1/2" Ported), 100 PSI, Poly, Banjo Ball	1-063-0172-185	$520.00
On/Off Valve, 2", SS, Butterfly	1-063-0172-178	$675.00
On/Off Valve, 3", SS, Butterfly	1-063-0172-182	$1,155.00
Boom Valve, Single Manifold	1-063-0171-926	$184.00
Kit Valve Single Manifold	1-117-0171-520	$3,270.00
Boom Valve, 3 Section Manifold	1-063-0171-928	$555.00
Boom Valve, 5 Section Manifold	1-063-0172-039	$925.00
Valve, On/Off, 1 1/4" NPT, NH3, SS	1-063-0173-203	$525.00
Valve, On/Off 1 1/2" NPT, NH3, SS	1-063-0173-668	$790.00

Manual System Control Valves

***For SCS 11, 203 or 303**

Control Valve, 3/4", Poly, 360 Deg	1-063-0159-001	$84.00
Control Valve, 1", Poly, 360 Deg Flanged	1-063-0172-126	$207.00
Control Valve, 1 1/2", Poly, 360 Deg Flanged & Threaded	1-063-0171-895	$281.00

Application Controls

Valve Products

Hydraulic Control Valves

3 GPM Hydraulic Control Valve	1-063-0173-159	$510.00
8 GPM Hydraulic Control Valve	1-063-0173-160	$510.00
16 GPM Hydraulic Control Valve	1-063-0172-195	$493.00
30 GPM Hydraulic w/out Pressure Comp.	1-063-0172-196	$495.00
3 GPM Hydraulic w/ Fast Motor	1-063-0173-161	$525.00
8 GPM Hydraulic w/ Fast motor	1-063-0173-162	$525.00
16 GPM Hydraulic w/ Fast Motor	1-063-0173-163	$525.00
30 GPM Hydraulic w/ Fast Motor	1-063-0173-164	$525.00
5 GPM PWM Hydraulic Control Valve	1-063-0171-841	$605.00
10 GPM PWM Hydraulic Control Valve	1-063-0171-842	$615.00
15 GPM PWM Hydraulic Control Valve	1-063-0171-843	$605.00
30 GPM PWM Hydraulic Control Valve	1-063-0171-846	$605.00
30 GPM Hydraulic Valve w/o Press Comp	1-063-0173-165	$510.00
25 GPM Hydraulic Valve (adjustable w/ fast motor)	1-063-0172-844	$880.00
40 GPM Hydraulic Valve (adjustable w/ fast motor)	1-063-0172-897	$985.00

Check Valves

Check Valve, 5 PSI, PP	1-333-0011-001	$9.05
Check Valve, 3/8", .5 PSI, SS, Teflon Ball	1-333-0011-078	$83.00
Check Valve, 1 1/4", .5 PSI, SS	1-333-0011-082	$279.00
Check Valve, 2", .5 PSI, SS	1-333-0011-084	$640.00
Check Valve, 1/2", Delrin	1-333-0011-087	$21.00
Check Valve, 1/2", 8 GPM (not for use with injection)	1-333-0011-088	$39.00
Check Valve, 1", 14 GPM, carrier	1-333-0011-090	$60.00
Check Valve, 1 1/4", 22 GPM, carrier	1-333-0011-091	$75.00
Check Valve, 2", 70 GPM, carrier	1-333-0011-093	$183.00
Check Valve Assy NH3 Multi Section	1-063-0173-030	$409.00
Check Valve, 3", 110 GPM, carrier	1-333-0011-094	$309.00
Check Valve, Recirculation/Priming w/ Bleed Hole	1-333-0011-100	$76.00
Check Valve, 1/2", SS, 12 PSI, Extreme Viton (use w/ NH3 & N Serve)	1-333-0011-102	$75.00

Miscellaneous

Cable, Adapter, 4-pin DJ Hydraulic Valve to 2-pin Raven	1-115-0159-884	$37.00
Bracket, Valve Assembly, 1/4" SS Ball	1-063-0172-153	$195.00
Coupler, Upper, Hydraluic Valve	1-107-0171-693	$21.00
Coupler, Hydraulic Valve	1-107-0171-694	$33.00

Speed Sensors, Cables, and Components

Speed Sensors

Phoenix 10™ GPS Speed Sensor	1-117-0171-165	$460.00
Wheel Drive Speed Sensor - 21' (4 Magnet)	1-063-0159-484	$273.00
Wheel Drive Speed Sensor (2 Magnet)	1-063-0159-539	$238.00
Drive Shaft Speed Sensor	1-063-0159-730	$243.00
Wheel Drive Speed Sensor. 7 1/2 ft. (4 Magnet)	1-063-0171-152	$281.00
Raven Radar Power Cable (12ft)	1-115-0159-539	$104.00
Kit Radar w/Power Cable	9-117-0159-822	$595.00
Radar Gun Assembly	1-063-0172-143	$525.00
Speed Sensor Gear Tooth/Proximity	1-063-0172-443	$70.00
Sensor Assembly(21 FT.) Std.	1-063-0159-438	$159.00

Application Controls

Speed Sensors, Cables, and Components

Radar Speed Sensor Interface Cable

1990 Model Year or later with factory installed performance monitor.

Raven Radars

Ford Gen./Vers./New Holland	1-115-0159-754	$100.00
John Deere	1-115-0159-550	$100.00
Case-IH	1-115-0159-551	$129.00

Dickey-John/Vansco Radars

Ford Gen./Vers./New Holland (w/ SP2)	1-115-0159-709	$161.00
John Deere (w/ SP2)	1-115-0159-519	$120.00
John Deere 30 Series (w/ SP2)	1-115-0171-670	$99.00
John Deere 7000/8000/9000 Series (w/ SP2)	1-115-0159-700	$112.00
Case-IH and New Holland TG (w/ SP2)	1-115-0159-517	$132.00
Case MX or STX Vehicles (w/ SP2)	1-115-0171-304	$181.00
Cat Challenger models 65 & 75 (w/ SP2)	1-115-0159-518	$203.00
Cat Challenger 65C, 75C, 65D, 75D, 85D, and Row Crop 35, 45, & 55 (w/ SP2)	1-115-0159-627	$142.00
Ford/White/Agco Allison (w/ SP2)	1-115-0159-529	$128.00
Caterpillar (w/ SP2)	1-115-0159-580	$89.00
Unspecified (w/out SP2)	9-063-0159-598	$287.00

Magvox/Phillips Radars

John Deere (w/ SP2)	1-115-0159-519	$120.00
John Deere 30 Series (w/ SP2)	1-115-0171-670	$99.00

TRW Radars

Case-IH (w/ SP2)	1-115-0159-432	$126.00

Components Included in Cable Assemblies

Unspecified (w/out SP2)	9-063-0159-598	$287.00
Case-IH (w/ SP2)	1-115-0159-432	$126.00
Case-IH and New Holland TG (w/ SP2)	1-115-0159-517	$132.00
Cat Challenger models 65 & 75 (w/ SP2)	1-115-0159-518	$203.00
John Deere (w/ SP2)	1-115-0159-519	$120.00
Ford/White/Agco Allison (w/ SP2)	1-115-0159-529	$128.00
Raven Radar Cable (12ft)	1-115-0159-539	$104.00
John Deere Vehicles	1-115-0159-550	$100.00
Case-IH Vehicles	1-115-0159-551	$129.00
Y-Cable, Raven Radar to DJ Planter Monitor & Raven Console	1-115-0159-552	$142.00
Caterpillar Vehicles (Console wih revision "E" or later)	1-115-0159-580	$89.00
Cat Challenger 65C, 75C, 65D, 75D, 85D, and Row Crop 35, 45, & 55 (w/ SP2)	1-115-0159-627	$142.00
John Deere 30 Series (w/ SP2)	1-115-0171-670	$99.00
John Deere 7000/8000/9000 Series (w/ SP2)	1-115-0159-700	$112.00
Ford Gen./Vers./New Holland (w/ SP2)	1-115-0159-709	$161.00
Ford Gen./Vers./New Holland Vehicles	1-115-0159-754	$100.00
Case MX or STX (w/ SP2)	1-115-0171-304	$181.00
Unspecified (w/ SP2)	1-115-0159-526	$107.00

Application Controls

Miscellaneous Components

Speed Sensor Adapter. Hagie	1-115-0171-279	$37.00
Adapter. Hagie 284 TXP	1-115-0171-402	$96.00
Speed Sensor, Case IH Maxim 110-170	1-115-0171-228	$97.00
Y-Cable, Raven Radar to DJ Planter Monitor & Raven Console	1-115-0159-552	$142.00
Y-Speed Cable Adaptor	1-115-0159-472	$143.00
Bracket, Mounting, Viper/4000 Series	1-107-0171-415	$37.00
Switchbox Assembly (5 Boom) for SCS 750/4000 series/Viper	1-063-0159-907	$323.00
Switchbox Assembly (10 Boom) for SCS 750/4000 series/Viper	1-063-0159-908	$409.00
Switchbox Assembly (7 Boom) for SCS 460/660	1-063-0171-335	$429.00
10' Speed Extension Cable	1-115-0171-262	$55.00
12' Speed Extension Cable	1-115-0159-032	$60.00
18' Speed Extension Cable	1-115-0171-239	$65.00
24' Speed Extension Cable	1-115-0159-018	$70.00
29' Speed Extension Cable	1-115-0171-241	$75.00
34' Speed Extension Cable	1-115-0171-225	$80.00
6' Flow Extension Cable (CON-X-ALL)	1-115-0159-016	$58.00
12' Flow Extension Cable (CON-X-ALL)	1-115-0159-017	$62.00
24' Flow Extension Cable (CON-X-ALL)	1-115-0159-019	$75.00
36.5' Flow Extension Cable	1-115-0171-544	$95.00
Cable Adapter, fast valve to PWM valve	1-115-0172-055	$84.00

Application Controls

AccuFlow™

Kits, Single Cooler

***Includes 1 1/2" AccuFlow Super Cooler Orifice, 1 1/4" Fast Valve, RFM 60S Flowmeter, Assembly Fittings, Space Saver Kit**
****Includes 1 1/2" AccuFlow Super Cooler, 1 1/4" Control Valve, 1 1/4" On/Off Valve, RFM 60S Flowmeter, Assembly Fittings, Space Saver Kit**
*****Must order Vapor Tube Kits separately**

Kit, AccuFlow, Single Cooler, Fast Valve*	1-117-0171-386	$3,330.00
Kit, AccuFlow, Single Cooler, Two Valve**	1-117-0171-384	$3,560.00

Kits, Other

Upgrade Kit, Single Cooler to Dual Cooler	1-117-0171-390	$1,915.00
Kit, Vapor Tube 3/4 two tubes, kit inc hose and clamps***	1-117-0171-409	$113.00
Kit, Vapor Tube 1/2 four tubes, kit inc hose and clamps***	1-117-0171-410	$156.00

Cables & Components

*** New valve w/ round molded connector and cable to old style 2-pin flat connector on flow cable**
**** With round connector to older 3 wire hook up**

Cable, Adapter for NH3 Valve Control 1" to 2 PIN Flat*	1-115-0171-807	$68.00
Cable, Adapter for NH3 Valve On/Off 1" to 2 PIN Flat**	1-115-0171-808	$68.00
Cable, Adapter for NH3 Fast 1" to 2 PIN Flat*	1-115-0171-807	$68.00
Cable, 10' Console, SCS 440	1-115-0171-085	$199.00
Cable, Adapter for NH3 On/Off Valve to 3 PIN Weather Pack	1-115-0171-815	$68.00
Cable, Adapter for NH3 On/Off Valve, Spade to 4 PIN rnd conxall	1-115-0171-856	$74.00
Cable, Adapter for NH3 Control Valve, 2 PIN Flat to 4 PIN rnd conxall	1-115-0171-857	$80.00
Assembly, Super Cooler, Orifice	1-063-0173-491	$715.00
Kit, Orifice NH3 (contains orifice fittings)	1-117-0171-501	$42.00

Application Controls

AccuFlow™

Replacement Parts, AccuFlow™

***Universal - use w/ 063-0159-837, 063-0159-546, 063-0172-877 and 063-0173-314 coolers**
****Use w/ 063-0159-837 and 063-0159-546 coolers**
*****Use w/ 063-0172-877 and 063-0173-314 coolers**

1-1/4 Ball C.S. Valve Manual Safety ON/OFF	1-019-0159-245	$154.00
1 -1/2 Ball C.S. Valve Manual Safety ON/OFF	1-019-0159-571	$232.00
RFM 60S, 1-60 GPM, S.S., NH3	1-063-0171-666	$630.00
Sensor Assy External Flowmeter	1-063-0171-669	$93.00
Valve Control 1" Jamesbury (New Round Molded Connector)	1-063-0172-977	$480.00
Valve On/Off 1" Jamesbury (New Round Molded Connector)	1-063-0172-978	$475.00
Valve Fast 1" Jamesbury (New Round Molded Connector)	1-063-0172-979	$550.00
Motor Assembly only, Control Valve	1-063-0172-980	$281.00
Motor Assembly only, On/Off Valve	1-063-0173-207	$260.00
Motor Assembly only, Fast Valve	1-063-0172-982	$342.00
Check Valve Assy NH3 Multi Section	1-063-0173-030	$409.00
Valve, Control, 1 1/4" NPT, NH3, SS	1-063-0173-202	$525.00
Valve, On/Off, 1 1/4" NPT, NH3, SS	1-063-0173-203	$525.00
Valve, Fast, 1 1/4" NPT, NH3, SS	1-063-0173-204	$580.00
Valve, Assembly, 1-1/4" Ball, Stainless Steel	1-063-0173-209	$193.00
Kit 1"S.S. Ball & Mnt Hrdwr NH3	1-063-0173-256	$200.00
Valve, Assembly, 1" Ball, Stainless Steel	1-063-0173-257	$163.00
1 -1/2 Y strainer assembly	1-063-0173-312	$99.00
Assembly, Super Cooler, Orifice	1-063-0173-491	$715.00
Kit,Gasket*	1-117-0171-121	$74.00
Kit, Safety Label	1-117-0171-129	$29.00
Retrofit Kit NH3 Control Valve & Adpt Cable	1-117-0171-156	$565.00
Retrofit Kit NH3 On/Off Valve & Adpt Cable	1-117-0171-158	$555.00
Retrofit Kit NH3 Fast Valve & Adpt Cable	1-117-0171-157	$685.00
On/Off Control Valve Indicator Kit	1-117-0171-219	$20.00
30 GPM (1 1/2") NH3 single cooler w/out valves and flow meter. Plumbing Kit (117-0171-385) included	1-117-0171-391	$1,845.00
Tube only NH3 Vapor 3/4"	1-214-0002-002	$8.75
Tube only NH3 Vapor 1/2"	1-214-0002-003	$8.75
Gasket Teflon for 1 1/4" Y Strainer	1-219-0000-091	$4.35
Gasket, Heat Exchanger**	1-219-0000-142C	$8.60
Gasket, Flange, Heat Exchanger***	1-219-0000-143	$12.00
Gasket, Retainer, Flange, Heat Exchanger**	1-219-0000-144	$21.00
Gasket Teflon For 1 1/2" Y Strainer	1-219-0000-154	$15.00
bushing reducer 1- 1/2 to 1- 1/4	1-333-0003-019	$7.25
1-1/4 Y strainer assembly	1-333-9000-025	$67.00
Screen 20 mesh for 1 1/4" Y Strainer	1-333-9000-032	$35.00
Y Strainer, 1 1/2", NH3	1-333-9000-066	$56.00
Screen 20 mesh For 1 1/2" Y Strainer	1-333-9000-067	$23.00
Pressure Transducer	1-422-0000-090	$272.00

Application Controls

AccuFlow™

Controller Kits, CAN AccuFlow™

Note: These kits include the control node and node cable. Please refer to the application drawings for other required cables.

Kit, AccuFlow or AccuFlow HP, for existing SCS 4400 Switch Pro (GEN I)	1-117-0171-334	$1,035.00
Kit, CAN AccuFlow or AccuFlow HP, 3 section (GEN II)	1-117-5300-001	$1,990.00
Kit, CAN AccuFlow or AccuFlow HP, 6 section (GEN II)	1-117-5300-002	$2,155.00
Kit, ISO AccuFlow or AccuFlow HP, 3 section	1-117-6300-001	$1,955.00
Kit, ISO AccuFlow or AccuFlow HP, 6 section	1-117-6300-002	$2,090.00

Cables

NH3 Cables for Multi Section Bar

Cable NH3 Flow 3 section for 440/450/Switch Pro	1-115-0171-836	$428.00
Cable NH3 Flow 3 section for 4400/Switch Pro	1-115-0171-837	$464.00
Cable NH3 12' Extension for 1 to 3 section 440/450	1-115-0159-856	$186.00
Cable NH3 24' Extension for 1 to 3 section 440/450	1-115-0159-857	$205.00
Cable NH3 Flow 6 section for 440/450/Switch Pro	1-115-0171-838	$685.00
Cable NH3 Flow 6 section for 4400/Switch Pro	1-115-0171-839	$710.00
Cable NH3 12' Extension 6 section 440/450/Switch Pro	1-115-0171-840	$172.00
Cable NH3 24' Extension 6 section 440/450/Switch Pro	1-115-0171-841	$264.00
Cable NH3 12' Extension 6 section 4400/Switch Pro	1-115-0171-842	$195.00
Cable NH3 24' Extension 6 section 4400/Switch Pro	1-115-0171-843	$289.00
Cable Power NH3 Sections 4,5&6 use w/ 840,841,842 or 843	1-115-0171-844	$100.00

NH3 Cables for Single Section Bar

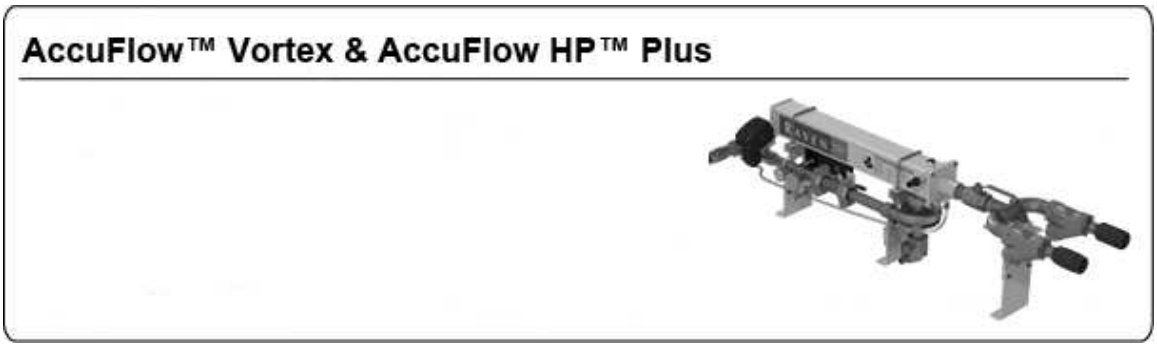
Cable NH3 12' Flow single section for 440	1-115-0171-800	$218.00
Cable NH3 12' Flow single section for 4400	1-115-0171-809	$322.00
Cable NH3 12' Extension single section for 4400	1-115-0171-319	$384.00
Cable NH3 24' Extension single section for 4400	1-115-0171-320	$394.00

NH3 On/Off Valve Extension Cables

Cable 6' Extension for NH3 On/Off Valve	1-115-0171-832	$65.00
Cable 12' Extension for NH3 On/Off Valve	1-115-0171-833	$77.00
Cable 24' Extension for NH3 On/Off Valve	1-115-0171-834	$92.00

Application Controls

AccuFlow™ Vortex & AccuFlow HP™ Plus



Kits, AccuFlow™ Vortex & AccuFlow HP™ Plus

***Must order vapor tube kits seperately**
****Kit includes: HP Plus Pump, Vortex Cooler, RFM 60 SG Flow Meter, 1 1/2" Fast Valve, Hyd. PWM HP Plus Valve and Dual Inlet Manifold**
*****Kit includes: Vortex Cooler, RFM 60SG Flow Meter, 1 1/2" Fast Valve and Dual Inlet Manifold**
^Kit includes: Vortex Cooler, RFM 60SG Flow Meter, 1 1/2" Standard Control Valve, 1 1/2" On/Off Valve and Dual Inlet Manifold
^^Kit includes: Vortex Cooler, RFM 60SG Flow Meter, 1 1/2" Fast Valve, and Single Inlet Manifold
^^^Kit includes: Vortex Cooler, RFM 60 SG Flow Meter, 1 1/2" Standard Control Valve, 1 1/2" On/Off Valve, and Single Inlet Manifold

Kit, HP Plus w/Vortex Cooler, Fast Valve only**	1-117-0171-571	$10,295.00
Kit, Vortex Fast Valve***	1-117-0171-573	$5,895.00
Kit, Vortex Dual Valve^	1-117-0171-574	$6,295.00
Kit, Pump Upgrade (Includes HP Plus Pump, Hyd PWM Valve and Hyd Kit)	1-117-0171-575	$4,750.00
Kit, Dual Inlet Manifold	1-117-0171-578	$1,910.00
Kit, AccuFlow Vortex, Single Inlet, Fast Valve^^	1-117-0171-612	$5,095.00
Kit, AccuFlow Vortex Single Inlet, Dual Valve^^^	1-117-0171-613	$5,495.00
Kit, Vapor Tube 3/4" two tubes, kit inc hose and clamps*	1-117-0171-409	$113.00
Kit, Vapor Tube 1/2" four tubes, kit inc hose and clamps*	1-117-0171-410	$156.00

Cables, AccuFlow HP™ Plus

Cable, Single Product Node, AccuFlow HP (GEN I)	1-115-0171-909	$248.00
Cable, Chassis Cat Challenger / Generic Systems (GEN II)	1-115-0171-915	$490.00
Cable, Implement Extension Tee, 1' (GEN II)	1-115-0171-928	$232.00
Cable, Implement Extension Tee, 12' (GEN II)	1-115-0171-916	$310.00
Cable, Implement Extension Tee, 24' (GEN II)	1-115-0171-917	$361.00
Cable, Cab PWR/CAN SCS 4x00/5x00 Series (GEN II)	1-115-0171-927	$258.00
Cable, Tee Adpt SCS 4400 to Accuflow HP Node	1-115-0171-940	$374.00

AccuFlow™ Vortex & AccuFlow HP™ Plus Replacement Parts

Inlet Plumbing Components

2" Inlet Y-Manifold Kit	1-117-0171-578	$1,910.00
1-1/2" SS Check Valve	1-333-0011-083	$410.00
2" Y-Strainer (Strainer ,Screen, Gaskets, Magnets)	1-063-0173-655	$100.00
40 Mesh Strainer Screen	1-333-9000-071	$88.00
2" Strainer Gasket	1-219-0000-161	$21.00
Strainer Magnet	1-418-0000-001	$4.10
2" SS Inlet Y-Manifold	1-116-0159-742	$530.00
2" Inlet Shutoff Valve	1-063-0173-627	$378.00

Application Controls

AccuFlow™ Vortex & AccuFlow HP™ Plus

AccuFlow™ Vortex & AccuFlow HP™ Plus Replacement Parts

Vortex Cooler and Bleed Components

Vortex Cooler Assembly (Cooler, Seals, Decals, Relief Valve)	1-063-0173-663	$780.00
Seal/Hardware Kit	1-117-0171-591	$31.00
Seal/Hardware Kit	1-334-0002-005	$35.00
1/4" Bleed Valve	1-334-0001-064	$61.00
Bleed Circuit High Pressure Hose	1-214-0001-046	$104.00

AccuFlow HP™ Plus Pump and Plumbing Components

HP Plus Pump and Plumbing Components	1-117-0171-575	$4,750.00
2-1/2" Gruv-Lok Coupling w/Gasket	1-333-0006-031	$87.00
HP Plus Boost Pump	1-416-1001-010	$3,670.00
HP Plus Hydraulic Motor Seal Kit	1-117-0171-576	$103.00
HP+ Boost Pump Seal Kit	1-117-0171-577	$296.00
PWM Hydraulic Valve	1-334-0001-042	$600.00
1-1/2" SS Pump Outlet Fitting	1-019-0159-591	$70.00

Flow Meter Components

RFM 60SG Flowmeter	1-063-0173-618	$660.00
RFM 60SG Internal Replacement Parts Kit	1-117-0171-590	$189.00
Flowmeter Sensor Assembly w/Nut	1-063-0171-669	$93.00
2" x 1-1/2" Gruv-Lok Coupling w/Gasket	1-333-0006-032	$87.00

Gauge Tree and Sensor Components

1-1/2" SS Gauge Tree Manifold	1-116-0159-743	$259.00
0-250 PSI Pressure Gauge	1-417-0001-031	$123.00
'-40F - 120F Temperature Gauge	1-417-0001-030	$160.00
0-250 PSI Pressure Transducer	1-422-0000-090	$272.00

Control and On/Off Valve Components

1-1/2" SS Fast Valve Assembly	1-063-0173-626	$805.00
Fast Valve Motor Assembly	1-063-0173-666	$373.00
On/Off Motor Assembly	1-063-0173-665	$358.00
1-1/2" Standard Control Valve	1-063-0173-667	$765.00
Standard Control Valve Motor Assembly	1-063-0173-664	$332.00
1-1/2" On/Off Valve Assembly	1-063-0173-668	$790.00
Valve Position Indicator Kit	1-117-0171-219	$20.00

Outlet Plumbing Components

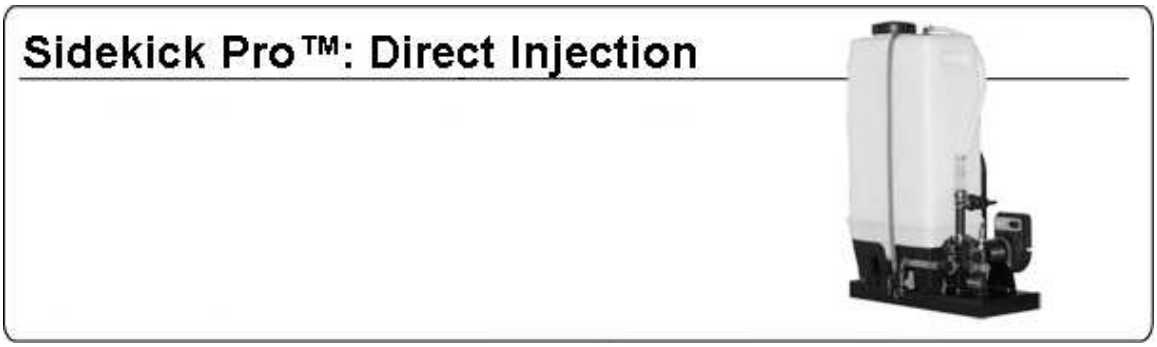
1-1/2" SS Outlet Tee Fitting	1-019-0159-592	$113.00
1-1/4" SS Check Valve	1-333-0011-082	$279.00

Replacement Parts, AccuFlow HP ™

Pump, Centrifugal, AccuFlow HP	1-416-1001-009	$2,235.00
Kit, Seal Pump Hyd Motor, NH3 HP	1-117-0171-354	$115.00
Kit, Seal Pump, NH3 HP	1-117-0171-353	$450.00
Valve, Control, 1 ¼" NPT NH3, SS	1-063-0173-202	$525.00
Valve, On/Off, 1 ¼" NPT NH3, SS	1-063-0173-203	$525.00
Valve, Fast, 1 ¼" NPT NH3, SS	1-063-0173-204	$580.00

Application Controls

Sidekick Pro™: Direct Injection



Kits, Sidekick Pro™

Kit, Injection Pump, 1-40 oz/min	1-063-0173-201	$3,175.00
Kit, Injection Pump, 5-200 oz/min	1-063-0173-200	$3,175.00
Kit, Injection Pump w/ tank, 1-40 oz/min	1-063-0173-212	$3,600.00
Kit, Injection Pump w/ tank, 5-200 oz/min	1-063-0173-213	$3,600.00
Kit, Rinse Assist, Sidekick Pro (Must have label on pump that states: Rinse Assist Ready)	1-117-0171-554	$640.00

Cables, Sidekick Pro™

Cable, CAN motor control, w/ agitator and Rinse Assist (GEN I)	1-115-0172-192	$490.00
Cable, Sidekick Pro GEN II w/ agitator and Rinse Assist	1-115-0172-191	$387.00
Cable, 35', 3rd/4th injection pump (GEN II)	1-115-0171-953	$431.00
Cable, 6', 3rd/4th injection pump (GEN II)	1-115-0171-954	$358.00
Cable, 12', 3rd/4th injection pump (GEN II)	1-115-0171-955	$385.00
Cable, 24', 3rd/4th injection pump (GEN II)	1-115-0171-956	$421.00
Cable, 36', 3rd/4th injection pump (GEN II)	1-115-0171-957	$450.00

Flow Monitor Cables (3 pin weatherpack connector)

Cable, Sidekick Pro, Gen I w/agitator	1-115-0172-104	$426.00
Cable, Sidekick Pro Gen I w/out agitator	1-115-0172-105	$373.00
Cable, Adapter, -952 Cable to -492 Flow Monitor (Old power cable; 3 pin weatherpack to new Flow Monitor; 3 pin Conxall)	1-115-0172-110	$54.00
Cable, Adapter, -107 Cable to -979 Flow Monitor (New power cable; 3 pin Conxall to old Flow Monitor; 3 pin weatherpack)	1-115-0172-111	$49.00

Components, Sidekick Pro™

Pump, 5-200 oz/min	1-063-0173-081	$2,915.00
Pump, 1-40 oz/min	1-063-0173-103	$2,915.00
Valve, recirculation w/ calibrator	1-063-0173-260	$310.00
Cover, calibrator	1-106-0159-637	$30.00
Bearing Kit (pump, drive bearing, screws, o-ring and key)	1-117-0171-394	$50.00
Seal Kit for Pump	1-117-0159-987	$40.00
Check Valve, recirculation/priming w/ bleed hole	1-333-0011-100	$76.00
Pump Only	1-063-0172-924	$1,260.00
Inlet Check Valve Assembly	1-063-0172-504	$91.00
Outlet Check Valve with Tranducer	1-063-0173-310	$98.00
Intake Check Valve Assembly	1-063-0173-677	$91.00
Pump Calibrator	1-063-0172-822	$159.00

Application Controls

Sidekick Pro™: Direct Injection

ISO Injection Pumps, Sidekick Pro™

ISO Pump, without tank, 1-40 oz/min	1-063-0173-420	$4,235.00
ISO Pump, without tank, 5-200 oz/min	1-063-0173-421	$4,235.00
ISO Pump, with 24 gal tank, 1-40 oz/min	1-063-0173-422	$4,655.00
ISO Pump, with 24 gal tank, 5-200 oz/min	1-063-0173-423	$4,655.00

Components & Cables, ISO Injection

Pump, ISO Injection, 5-200 oz/min, without calibrator	1-063-0173-402	$3,975.00
Pump, ISO Injection, 1-40 oz/min, without calibrator	1-063-0173-403	$3,975.00
Cable Adapter, JD ISO to Raven ISO Injection, 6'	1-115-0172-081	$437.00
Cable Adapter, JD ISO to Raven ISO Injection, 12'	1-115-0172-082	$490.00
Cable Adapter, JD ISO to Raven ISO Injection, 24'	1-115-0172-083	$580.00
Cable Adapter, JD ISO to Raven ISO Injection, 36'	1-115-0172-084	$620.00
Cable, ISO motor control, with agitator	1-115-0172-106	$426.00
Cable, ISO motor control, without agitator	1-115-0172-107	$347.00
Cable, 6' Extension, JD ISO to Raven ISO	1-115-0172-093	$187.00
Cable, 12' Extension, JD ISO to Raven ISO	1-115-0172-094	$214.00
Cable, 24' Extension, JD ISO to Raven ISO	1-115-0172-095	$256.00

Sidekick™: Direct Injection

SCS-Sidekick™

Components, SCS-Sidekick™

*** For systems other than Sidekick, add a Motor Control and a Motor Control Mounting Kit.**

Console Cable 15'	1-115-0171-130	$319.00
Product Cable 27'	1-115-0171-138	$235.00
Adapter Cable, Non-Raven to SCS-Sidekick	1-115-0171-147	$59.00
Plumbing Kit	1-117-0159-760	$231.00
Product Cable 3'	1-115-0171-305	$155.00

Cables, SCS-Sidekick™

Adapter Cable, SCS-Sidekick to John Deere 4700/4710/4720	1-115-0171-165	$255.00
Cable Boom SCS-Sidekick to John Deere 4920/4930	1-115-0171-522	$146.00
Cable Boom Sense SCS-Sidekick to John Deere 4920/4930	1-115-0171-523	$905.00
Boom Adapter Cable, SCS-Sidekick to John Deere 4730/4830	1-115-0171-757	$353.00

Injection Check Valves

Check Valve, 3/8", .5 PSI, SS, Teflon Ball	1-333-0011-078	$83.00
Check Valve, 1/2", SS, 12 PSI, Extreme Viton (use w/ NH3 and N Serve)	1-333-0011-102	$75.00
Check Valve, 1", 14 GPM, carrier	1-333-0011-090	$60.00
Check Valve, 1 1/4", 22 GPM, carrier	1-333-0011-091	$75.00
Check Valve, 2", 70 GPM, carrier	1-333-0011-093	$183.00
Check Valve, 3", 110 GPM, carrier	1-333-0011-094	$309.00

Miscellaneous Components, SCS-Sidekick™

Calibration Flask	1-106-0159-454	$87.00
Kit, Circuit Breaker Sidekick	1-117-0159-967	$34.00

Application Controls

Sidekick™: Direct Injection

SCS-Sidekick™

Injection Components

Motor Controls

Motor Control (for 700/750 Injection systems) w/out bracket	1-063-0172-226	$640.00
Motor Control w/ bracket (replaces 063-0159-788)	1-063-0172-297	$665.00
CAN Motor Control	1-063-0172-360	$965.00
CAN Motor Control w/ Agitator control capability	1-063-0172-479	$985.00
Cable, 35' Power CAN Motor Control	1-115-0171-582	$256.00
Kit, Motor Control Mounting	1-117-0159-984	$46.00
Kit, Motor Control CAN w/ Agit and Power Cable	9-117-0171-029	$1,060.00
Kit, Motor Control CAN w/out Agit and Power Cable	1-117-0171-030	$1,060.00

Mix-All Agitators (48" shaft cut to desired length)

3" Blade Mix-All Electric Agitator	1-910-0000-331	$895.00
4" Blade Mix-All Electric Agitator	1-910-0000-341	$970.00

In-Line Mixers

In-Line Mixer, 1 1/4" Poly	1-063-0159-632	$154.00
In-Line Mixer, 2" Poly	1-063-0171-300	$179.00
In-Line Mixer, 1" Poly	1-063-0171-303	$154.00
Stainless Steel Mixer, 3" Diameter	1-333-9000-010	$620.00
Mixer, Flow Assembly 1" NPT (Cast Iron) NH3	1-063-0171-784	$205.00
Mixer, Flow Assembly 1 1/4" NPT (Cast Iron) NH3	1-063-0173-388	$230.00
4" Mixer, SS, assembled w/ back check and injection ports	1-063-0173-264	$1,125.00
3" Mixer, SS, assembled w/ back check and injection ports	1-063-0173-272	$960.00
2" Mixer, Poly, assembled w/ back check and injection ports	1-063-0173-235	$444.00
Mixer, Flow Assembly, 1" NPT, Low Flow	1-063-0173-432	$230.00

Tanks and Saddles

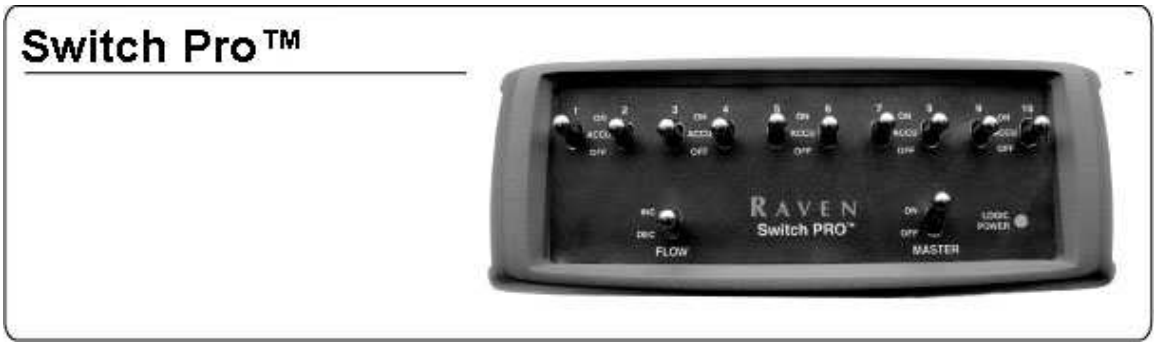
24 gal. Poly Tank	1-117-0159-540	$212.00
24 gal. Poly Tank (Agitator)	1-117-0159-541	$244.00
Cover 8-16-24 Gal Tank	1-118-0159-043	$7.65
Kit Saddle Asy 24 Gal Tank	1-117-0159-554	$179.00
Tank Saddle Only	1-118-0159-007	$78.00

Agitator Kits

Kit, Agitator, 8 Gal	1-117-0159-542	$715.00
Kit, Agitator, 16 Gal	1-117-0159-543	$715.00
Kit, Agitator, 24 Gal	1-117-0159-544	$770.00
Kit, Agitator, 30 Gal	9-063-0159-678	$715.00

Application Controls

Switch Pro™



Kits, Switch Pro™

GEN I

Kit, Switch Pro w/ SCS 4400 Cable System for Envizio Pro/Viper Pro	1-117-0171-168	$2,390.00
Kit, Switch Pro w/ SCS 440/450 Cable System for Envizio Pro/Viper Pro	1-117-0171-167	$2,465.00
Kit, Switch Pro w/ Enivizio Pro mounting bracket (no cables)	1-117-0171-190	$2,185.00
Kit, Envizio Pro II/Switch Pro for SCS 4400 Cable System w/ MBA-6 Antenna	1-117-0171-411	$6,435.00
Kit, Envizio Pro II/Switch Pro for SCS 440/450 Cable System w/ MBA-6 Antenna	1-117-0171-412	$6,435.00
Kit, Envizio Pro II/Switch Pro for SCS 4400 Cabled System, w/ MBA-6 Antenna and VRA	1-117-0171-446	$6,900.00
Kit, Envizio Pro II/Switch Pro for SCS 440/450 Cabled System, w/ MBA-6 Antenna and VRA	1-117-0171-447	$7,190.00

Cables, Switch Pro™

GEN I

Cable, Power, Extension	1-115-0171-810	$45.00
Cable, CAN Adapter Tee w/ Power	1-115-0171-368	$100.00
Cable, 6" CAN Adapter Tee	1-115-0171-364	$66.00
Cable, 6' CAN Adapter Tee	1-115-0171-326	$161.00
CAN Passive Terminator	1-063-0172-369	$106.00
Cable, Switch Pro Control Console to SCS 440/450 cables & Envizio Pro or Viper Pro Consoles	1-115-0171-803	$261.00
Cable, Combo Envizio Pro or Viper Pro/ Switch Pro Console to SCS 440/450 cables (includes terminators)	1-115-0171-820	$795.00
Cable, Combo Envizio Pro or Viper Pro/Switch Pro to SCS 4400 Cable System (includes terminators)	1-115-0171-821	$750.00
Adapter Cable, 37 pin (4400) to 22 pin (460/660) product cable	1-115-0171-864	$219.00
Cable, 3' Console, SCS 4400	1-115-0171-299	$387.00
Cable, 20' Console, SCS 4400	1-115-0171-300	$487.00
Cable, 12' Product, 10 Boom Liquid, SCS 4400/4600	1-115-0171-313	$358.00
Cable, 24' Product, 10 Boom Liquid, SCS 4400/4600	1-115-0171-314	$440.00
Cable, 12' Product, 5 Boom Liquid, SCS 4400/4600	1-115-0171-315	$254.00
Cable, 24' Product, 5 Boom Liquid, SCS 4400/4600	1-115-0171-316	$308.00
Cable, 21' Product, Granular, SCS 4600	1-115-0171-365	$330.00

Components, Switch Pro™

Switch Pro Console, 10 Section	1-063-0172-983	$2,090.00
Bracket Mounting, Switch Pro to Envizio Pro	1-107-0171-841	$26.00
Bracket Mounting, Viper Pro to Switch Pro	1-117-0171-181	$82.00

Application Controls

Switch Pro™

Optiol RAM Mount Components to Remote-Mount Consoles

Mnt 3" double socket - Size B	1-103-0001-014	$44.00
Round Base 2.5" diameter w/ 1/4 - 20 stud - Size B	1-103-0001-015	$33.00
Diamond Base Ball mount Ram - Size B	1-103-0001-016	$33.00
Large Ram Kit Inc. Lrg Bone & 2 Bases	1-117-0171-132	$100.00

Application Controls

Raven CAN GEN II Product Controls

Kits, CAN Product Controller

GEN II

Note: Kits include Level II node, node cable and CAN terminator. Purchase CAN/Power Tee and product cabling separately.

Kit, CAN product controller, liquid only to 16 pin product cable	1-117-5100-001	$1,720.00
Kit, CAN product controller, liquid/granular to 37 pin product cable	1-117-5100-002	$1,835.00
Kit, CAN product controller, liquid/granular to 22 pin product cable	1-117-5100-003	$2,045.00
Kit, CAN product controller, multi-product	1-117-5100-004	$2,045.00
Kit, CAN AccuFlow HP, 3 section	1-117-5300-001	$1,990.00
Kit, CAN AccuFlow HP, 6 section	1-117-5300-002	$2,155.00

Kit, Level III Node

Kit, Level III Node (4-10 product cable and mounting bracket)	1-117-5100-006	$2,960.00

Kit, Level I Node

Kit, Product Controller, Liquid/Granular to 37 pin product cable (integrated boom sense, for use with Raven Field Computer)	1-117-5100-012	$1,830.00

Raven CAN GEN II Product Controls

Components, CAN Product Controller

***Includes 1-077-0180-077 Boom Sense/Speed Authorization Code; J1939 Unlock**

Node, Product Controller, CAN, Raven, Level I (single product, spinner control, CAN-based manual section control)	1-063-0173-341	$790.00
Node, Product Controller, CAN, Raven, Level II (three product max, AccuBoom section control, tiered boom control)	1-063-0173-236	$1,250.00
Node, Product Controller, CAN, Raven, Level III (five product max, AccuBoom section control, tiered boom control)	1-063-0173-367	$1,720.00
Node, Product Controller, CAN, Raven, Level II (three product max, AccuBoom section control, tiered boom control)*	1-063-0173-414	$1,515.00
Node, Product Controller, CAN, Raven, Level I (single product, spinner control, CAN-based manual section control)*	1-063-0173-447	$1,050.00
Node, Product Controller, CAN, Raven, Level III (five product max, AccuBoom section control, tiered boom control)*	1-063-0173-449	$1,980.00
Terminator, CAN Passive, 16 Pin AMP	1-063-0173-224	$83.00
Terminator, CAN Passive	1-063-0172-369	$106.00

Application Controls

Raven CAN GEN II Product Controls

Authorization Codes, CAN Product Controller

Authorization Code, Product Controller Node, Level II Unlock	1-077-0180-065	$464.00
Authorization Code, Product Controller Node, Level III Unlock	1-077-0180-068	$464.00
Authorization Code, Product Controller Node, Boom Sense/Speed J1939 Unlock	1-077-0180-077	$250.00

Power/CAN Chassis and Field Computer/Console Cab Cables

Tracked and Row Crop Tractors w/Front Mounted Batteries (GEN II)	1-115-0171-915	$490.00
4WD Tractors w/ mid Mounted Batteries (GEN II)	1-115-0171-936	$439.00
CaseIH, Challenger & New Holland Row Crop Tractors (GEN II)	1-115-0171-937	$510.00
Large Frame JD and Buhler Row Crop Tractors (GEN II)	1-115-0171-938	$439.00
Cable, 10' Cab to Chassis Extension (GEN II)	1-115-0171-929	$145.00
Chassis Power Cable, steering only (GEN II)	1-115-4001-085	$232.00
Cable, Envizio Pro (II) Chassis Interface (GEN II)	1-115-0172-001	$444.00
Cable, Cruizer II Cab Interface (GEN II)	1-115-4001-066	$181.00
Terminator, CAN Passive, 16 pin AMP (GEN II)	1-063-0173-224	$83.00
Terminator, CAN Passive	1-063-0172-369	$106.00
Cable, SCS 5000 console to chassis (GEN II)	1-115-0171-959	$326.00
Cable Power/CAN Chassis Small Tractors (GEN II)	1-115-0172-046	$550.00
Cable, Cab, Power/CAN retro to existing console	1-115-0171-927	$258.00
Cable Adapter, GEN II Cabling to GEN I Components	1-115-0172-041	$193.00
Console Cable, Vpro/Epro GEN II Small Tractors	1-115-0172-047	$550.00

Cables, CAN Product Controller

Cable, Product Control, 16 pin (GEN II)	1-115-0171-949	$394.00
Cable, Product Control, 37 pin (GEN II)	1-115-0171-945	$488.00
Cable Adapter, 37 pin to 22 pin	1-115-0171-864	$219.00
Cable Control, Granular, 4-10 (GEN II)	1-115-0172-039	$1,625.00

Cables, CAN Multi-Product System

***Mates with 1-115-3001-082 product cable.**

Cable, Product Controller, Multi-Product, Interface to 37 pin product cables (4400/4600)*	1-115-3001-082	$685.00
Cable 12' product 10 Boom Liquid SCS4400/4600	1-115-0171-313	$358.00
Cable, 24' Product, 10 Boom Liquid, SCS 4400/4600*	1-115-0171-314	$440.00
Cable, 12' Product, 5 Boom Liquid, SCS 4400/4600*	1-115-0171-315	$254.00
Cable, 24' Product, 5 Boom Liquid, SCS 4400/4600*	1-115-0171-316	$308.00
Cable 21' Granular W/ Liq Control & 5 Boom Liquid	1-115-0171-365	$330.00
Cable, Product, 8 Section*	1-115-3001-083	$605.00
Cable 12' 4 Section Liquid on planter 37pin planter	1-115-3001-126	$214.00
Cable, 12' Product, SCS 4400 NH3 Systems, Single Section*	1-115-0171-809	$322.00
Cable 21' Granular	1-115-0172-014	$221.00
Cable, 12' Product Auxiliary, Liquid/Granular*	1-115-0172-005	$590.00
Cable 5' Extension	1-115-0171-418	$373.00
Cable 12' Extention	1-115-0171-319	$384.00
Cable 24' Extention	1-115-0171-320	$394.00
Cable, 12' Planter, Liquid 4 Section, 16 pin	1-115-3001-125	$275.00

Application Controls

Raven CAN GEN II Product Controls

Kits, Raven CAN Switch Box

Note: Kits include Switch Box and mounting bracket.

Kit, Raven CAN Switch Box for Envizio Pro (II)	1-117-5020-001	$650.00
Kit, Raven CAN Switch Box for Viper Pro	1-117-5020-002	$650.00
Kit, Raven CAN Switch Box for SCS 5000	1-117-5020-003	$650.00
Kit, Raven CAN Switchbox to Envizio Pro XL	1-117-5020-008	$650.00

Components, Raven CAN Switch Box

Raven CAN Switch Box	1-063-3001-002	$630.00
Mounting Bracket, Raven CAN Switch Box to Envizio Pro (II)	1-107-0171-841	$26.00
Bracket Mounting Kit, Raven CAN Switch Box to Viper Pro	1-117-0171-181	$82.00
Mounting Bracket, Raven CAN Switch Box to SCS 5000	1-107-0171-958	$28.00
Mounting Bracket, Raven CAN Switch Box to Viper 4	1-107-0172-266	$61.00

Components, RAM Mount

Kit, Large RAM (includes large bone & 2 bases)	1-117-0171-132	$100.00
Mount, 3" double socket (size B)	1-103-0001-014	$44.00
Base, round, 2.5" diameter (size B)	1-103-0001-015	$33.00
Base, diamond (size B)	1-103-0001-016	$33.00

Chassis Cables

GEN II

Note: Select one.

Cable, Power/CAN, Chassis, Tractors w/Front Mounted Batteries	1-115-0171-915	$490.00
Cable, Power/CAN, Chassis, Generic 4WD Tractors	1-115-0171-936	$439.00
Cable, Power/CAN, Chassis, Row Crop Tractors	1-115-0171-937	$510.00
Cable, Power/CAN, Chassis, Large Frame JD & Buhler Row Crop	1-115-0171-938	$439.00

Power/CAN Tee Implement Extensions

GEN II

Note: One is needed for each node.

Cable, CAN/Power Implement Tee, 12"	1-115-0171-928	$232.00
Cable, CAN/Power Implement Tee, 6'	1-115-0171-951	$284.00
Cable, CAN/Power Implement Tee, 12'	1-115-0171-916	$310.00
Cable, CAN/Power Implement Tee, 24'	1-115-0171-917	$361.00
Cable, CAN/Power Implement Tee, 36'	1-115-0171-934	$439.00

Power/CAN Extension Cables

GEN II

12' Power/CAN Extension Cable	1-115-3001-085	$395.00
20' Power/CAN Extension Cable	1-115-3001-086	$453.00
24' Power/CAN Extension Cable	1-115-3001-087	$361.00
28' Power/CAN Extension Cable	1-115-3001-088	$535.00
32' Power/CAN Extension Cable	1-115-3001-089	$560.00
36' Power/CAN Extension Cable	1-115-3001-090	$585.00
40' Power/CAN Extension Cable	1-115-3001-091	$595.00

Application Controls

Raven CAN GEN II Product Controls

Cables, CAN Product Control

Cable, extension, SCS 460/660, 24′	1-115-0159-717	$314.00
Cable, granular product, SCS 660, 21′	1-115-0159-787	$298.00
Cable, extension, SCS 440/450, 12′	1-115-0159-856	$186.00
Cable, extension, SCS 440, 24′	1-115-0159-857	$205.00
Cable, 6 boom, 6′	1-115-0171-086	$207.00
Cable, flow control, 12′	1-115-0171-129	$224.00
Cable, flow control, 24′	1-115-0171-206	$335.00
Cable, extension, SCS 460/660, 12′	1-115-0171-301	$210.00
Cable, 7 boom, 3 pin tower, 12′	1-115-0171-302	$279.00
Cable, 10 boom, SCS 4400/4600, 12′	1-115-0171-313	$358.00
Cable, 10 boom, SCS 4400/4600, 24′	1-115-0171-314	$440.00
Cable, 5 boom, SCS 4400-4600, 12′	1-115-0171-315	$254.00
Cable, 5 boom, SCS 4400-4600, 24′	1-115-0171-316	$308.00
Cable, extension, SCS 4400/4600, 12′	1-115-0171-319	$384.00
Cable extension, SCS 4400/4600, 24′	1-115-0171-320	$394.00
Cable, granular product, SCS 4600, 21′	1-115-0171-365	$330.00
Cable, adapter, 37 to 22 pin	1-115-0171-864	$219.00
Cable, 4400/4600 product control	1-115-0171-945	$488.00
Cable, CAN Accuflow HP 3 section master (GEN II)	1-115-0171-946	$665.00
Cable, CAN Accuflow HP 6 section master (GEN II)	1-115-0171-947	$850.00
Cable, product control, SCS 440/450	1-115-0171-949	$394.00
Cable, Agco Air Spreader, Level III Node, Micro Bin 5/6	1-115-0172-070	$266.00
Cable, Agco Air Spreader, Level III Node, 4-6 products	1-115-0172-071	$1,490.00
Cable, Product Control, Level II Node, Retro 460/660 control systems	1-115-0172-076	$590.00
Cable, Product Control, Level II Node, Retro 4600 control systems	1-115-0172-097	$510.00

Application Controls

Flow Max™

Flow Max™ 221 Flow Monitor

Flow Max 221 Assembly, 200 GPM	1-063-0173-653	$715.00
Lithium Battery	1-507-2001-006	$12.00
Clamp Hose	1-435-3003-009	$5.10
Mounting Bracket (RFM 100/200)	1-107-0159-509	$22.00

Flow Max™ 110 Flow Monitor

*** Requires Flow Meter: Can be configured with any Raven Flow Meter (See Flowmeters)**

Flow Max 110 Assembly (w/ 20' cable)	1-063-0171-357	$404.00

Flow Max™ 810 Flow Monitor

*** Requires Flow Meter: Can be configured with any Raven Flow Meter (See Flowmeters)**
*** Requires On/Off Valve: Can be configured with any Raven On/Off Valve (See Valves)**

Flow Max 810 Console	1-063-0171-214	$740.00
3' Console Cable (F.M. 810)	1-115-0159-763	$84.00
21' Control Cable (F.M.810)	1-115-0159-762	$138.00
10' Control Cable Ext. (F.M. 810)	1-115-0159-764	$64.00

Flowmeters

*** Needs adapter cable 1-115-0171-750 for Raven control connections or adapter cable 1-115-0171-751 for Case IH control connections**

RFM 5 Flowmeter (.1 - 5 GPM) (Stainless Steel)	1-063-0173-448	$1,835.00
RFM 15 (.3-15 GPM Poly) M200 Flanged	1-063-0172-040	$292.00
RFM 60S, 1-60 GPM, S.S., NH3	1-063-0171-666	$630.00
RFM 60 SG 1-60 GPM, S.S. NH3	1-063-0173-618	$660.00
RFM 60P (1-60 GPM Poly) M200 Flanged	1-063-0171-793	$399.00
RFM 100 (5-100 GPM Poly) M220 Flanged	1-063-0171-066	$645.00
RFM 200 Flow Meter (15-200 GPM Cast)	1-063-0159-574	$990.00
RFM 200P (15-200 GPM Poly) M300 Flanged	1-063-0159-751	$980.00
3" Magmeter Assembly (22-955 GPM)	1-063-0173-148	$5,570.00
4" Magmeter Assembly (35-1493 GPM)	1-063-0173-149	$5,570.00
6" Magmeter Assembly (70-3000 GPM)	1-063-0173-150	$6,490.00

On/Off Valves

1/4" Stainless Steel On/Off Valve (Ball)	1-063-0172-174	$442.00
3/4" Stainless Steel On/Off Valve (Ball) - NOT rated for NH3	1-063-0172-176	$505.00
1" NH3 On/Off Valve, 400 PSI (Carbon Steel)	1-063-0172-978	$475.00
1 1/2" On/Off Valve, 100 PSI (Poly)	1-063-0172-184	$477.00
2" (1 1/2" Ported) On/Off Valve 100 PSI (Poly)	1-063-0172-185	$520.00
2" Stainless Steel On/Off Valve (Butterfly)	1-063-0172-178	$675.00
3" Stainless Steel On/Off Valve (Butterfly)	1-063-0172-182	$1,155.00
Boom Valve Single Manifold	1-063-0171-926	$184.00
Kit Valve Single Manifold	1-117-0171-520	$3,270.00
Boom Valve, 3 Section Manifold	1-063-0171-928	$555.00
Boom Valve, 5 Section Manifold	1-063-0172-039	$925.00

Application Controls

Anti-Ice

DCS 400 Liquid Anti-Ice

DCS 400 Liquid De-Icer Console	1-063-0171-272	$1,560.00
10' Flow Cable - 3 Boom	1-115-0159-955	$293.00
31' Control Cable, DCS 400	1-115-0159-971	$293.00
2" Stainless Steel Butterfly Control Valve	1-063-0172-177	$665.00
RFM 100 (5-100 GPM Poly) M220 Flanged	1-063-0171-066	$645.00
Drive Shaft Speed Sensor	1-063-0159-730	$243.00
Control Valve Adaptor Cable DCS 400	1-115-0171-060	$18.00
Granular Encoder (180 CPR), 50 RPM Max (Replaces Flow Meter)	1-063-0171-071	$267.00
30 GPM Hydraulic w/ Fast Motor	1-063-0173-164	$525.00

DCS 410 Liquid Anti-Ice

DCS 410 Liquid De-Icer Console	1-063-0172-008	$1,995.00
Tier 2 Relay Box	1-063-0171-860	$403.00
31' Console Cable	1-115-0159-957	$600.00
Control Valve Adapter (Weather pack to standard)	1-115-0159-618	$6.40
RFM 60P (1-60 GPM Poly) M200 Flanged	1-063-0171-793	$399.00
RFM 100 (5-100 GPM Poly) M220 Flanged	1-063-0171-066	$645.00
RFM 200P (15-200 GPM Poly) M300 Flanged	1-063-0159-751	$980.00
1" Poly Control Valve. Flanged	1-063-0172-125	$262.00
1 1/2" 90 Deg. Poly Control Valve (Flanged & Threaded/Packard Shroud)	1-063-0171-896	$292.00
2" Stainless Steel Butterfly Control Valve	1-063-0172-177	$665.00
2" Poly On/Off Ball Valve (Weather Pack Connector)	1-063-0172-186	$605.00
50' Product Cable DCS 410	1-115-0171-093	$545.00
Flow Cable - 10'	1-115-0159-955	$293.00

DCS 300 Liquid Anti-Ice

3/4" Poly Control Valve (Butterly)	1-063-0171-120	$161.00
RFM 15 (.3-15 GPM Poly) M200 Flanged	1-063-0172-040	$292.00
Granular Rate Sensor 36 CPR	1-063-0171-701	$262.00
Granular Rate Sensor 180 CPR	1-063-0171-702	$262.00
19' Console Cable	1-115-0159-437	$261.00
32' Console Cable	1-115-0159-706	$335.00

DCS 310 Liquid Anti-Ice

3/4" Poly Control Valve (Butterly)	1-063-0171-120	$161.00
1" Poly Control Valve. Flanged	1-063-0172-125	$262.00
RFM 15 (.3-15 GPM Poly) M200 Flanged	1-063-0172-040	$292.00
Granular Rate Sensor 36 CPR	1-063-0171-701	$262.00
Granular Rate Sensor 180 CPR	1-063-0171-702	$262.00
30' Flow Cable	1-115-0159-878	$230.00

Application Controls

Anti-Ice

DLA 336

DLA 336 Console	1-063-0171-855	$1,995.00
Tier 2 Relay Box	1-063-0171-860	$403.00
31′ Console Cable	1-115-0159-957	$600.00
Product/10′ Flow Cable- DCS	1-115-0159-955	$293.00
Control Valve Adapter (Weather pack to standard)	1-115-0171-618	$75.00
RFM 60P (1-60 GPM Poly) M200 Flanged	1-063-0171-793	$399.00
RFM 100 (5-100 GPM Poly) M220 Flanged	1-063-0171-066	$645.00
RFM 200P (15-200 GPM Poly) M300 Flanged	1-063-0159-751	$980.00
1" Poly Control Valve. Flanged	1-063-0172-125	$262.00
1 1/2" 90 Deg. Poly Control Valve (Flanged & Threaded/Packard Shroud)	1-063-0171-896	$292.00
2" Stainless Steel Butterfly Control Valve	1-063-0172-177	$665.00
2" Poly On/Off Ball Valve (Weather Pack Connector)	1-063-0172-186	$605.00
50′ Product Cable DCS	1-115-0171-093	$545.00

DCS 700/710 Liquid Anti-Ice

DCS 700 Liquid Anti-Ice Console	1-063-0171-711	$1,860.00
DCS 710 Liquid Anti-Ice Console	1-063-0171-736	$2,330.00
DCS 710 Switchbox Kit	1-117-0159-718	$372.00
Tier 2 Relay Box	1-063-0171-860	$403.00
Product/Flow Cable 9′	1-115-0159-956	$177.00
Cable Pre-Wet 2′	1-115-0171-011	$115.00
Cable Adapter Gran/Brad Harrison	1-115-0171-016	$65.00
Cable Adapter Brad Harrison. Packard	1-115-0171-020	$72.00
RFM 15 (.3-15 GPM Poly) M200 Flanged	1-063-0172-040	$292.00
Granular Rate Sensor 36 CPR	1-063-0171-701	$262.00
Granular Rate Sensor 180 CPR	1-063-0171-702	$262.00
31′ Console Cable	1-115-0159-957	$600.00

Application Controls

Tractor Components

Radar Speed Sensor Cables

Raven Radar

Raven Radar Gun Assembly	1-063-0172-143	$525.00
Raven Radar Power Cable (12 ft)	1-115-0159-539	$104.00

Raven Radar to Third Party Adapter

Ford Gen/Versatile/New Holland Tractors	1-115-0159-754	$100.00
John Deere Tractors	1-115-0159-550	$100.00
CaseIH Tractors	1-115-0159-551	$129.00

Third Party Radar to Raven Speed Sensor Interface Cable

Ford Gen/Versatile/New Holland	1-115-0159-709	$161.00
John Deere w/Magnavox Radar	1-115-0159-519	$120.00
John Deere 30 Series	1-115-0171-670	$99.00
John Deere 7XX0/8XX0/9XX0/10 & 20 Series	1-115-0159-700	$112.00
Case-IH and New Holland TG	1-115-0159-517	$132.00
Case MX or STX Vehicles	1-115-0171-304	$181.00
CAT Challenger Models 65 & 75	1-115-0159-518	$203.00
CAT Challenger 65C,75C,65D,75D, 5D, & Row Crop 35,45,&55	1-115-0159-627	$142.00
CAT Vehicles Adaptor (Console with Rev "E" or later)	1-115-0159-580	$89.00
Ford/White/AGCO Allison/Dickey John	1-115-0159-529	$128.00
Dickey John with External Power	1-115-0159-526	$107.00
Dickey John Adapter	1-115-0159-580	$89.00
Case-IH w/TRW Radar Adapter	1-115-0159-432	$126.00
Case-IH Maxim 110-170 Adapter	1-115-0171-228	$97.00

Speed Sensor Extension Cables

10' Speed Sensor Extension Cable	1-115-0171-262	$55.00
12' Speed Sensor Extension Cable	1-115-0159-032	$60.00
18' Speed Sensor Extension Cable	1-115-0171-239	$65.00
24' Speed Sensor Extension Cable	1-115-0159-018	$70.00
29' Speed Sensor Extension Cable	1-115-0171-241	$75.00
34' Speed Sensor Extension Cable	1-115-0171-225	$80.00

Planter & Seeder Controls

OmniRow®

Raven OmniRow® Planter Monitoring & Control Systems

The Raven OmniRow® Series of planter controls provides an integrated platform for row/section shutoff, seed population monitoring, and data logging of up to 4 varieties, along with manual and prescription based population rate control. OmniRow® utilizes the Envizio Pro™ field computer and is available in four progressive levels to best fit budget and feature requirements. The OmniRow® seed monitoring system provides real time population and seed simulation data and therefore requires an OEM or aftermarket High-Rate seed sensor to be installed on each planter row unit. John Deere and White planters typically come equipped from the factory with this grade of sensor; however, most other brands of planters will need to be field updated with new sensors and harnesses. OmniRow® can be fully integrated with the Raven suite of GEN II liquid, granular and liquid injection product control offerings. A Planter and Seeder Auxiliary node provides planter down pressure monitoring and control, planter fan pressure monitoring and control, bin level monitoring along with integrated product and section control. In addition to advanced planter controls, the OmniRow® system is easily expanded to include Raven RTK level guidance, high speed internet access, wireless data transfer, and remote field computer support through the Slingshot® family of products.

	Level I OEM Sectional	Level II Raven Sectional	Level III MultiRow	Level IV IndiRow
Field Computer	Envizio Pro™ (II/XL)	Envizio Pro™ (II/XL)	Envizio Pro™ (II/XL)	Envizio Pro™ (II/XL)
Population Monitoring	Up to 24 Rows	Up to 16 rows	Up to 36 Rows	Up to 24 Rows
Row/Section On/Off Control	Optional up to 16 rows/sections	N/A	N/A	N/A
Planter Rate Control	Up to 4 OEM Motors	4 Raven Motors	Up to 12 motors with 1, 2 or 3 rows/motor	Up to 24 motors with 1 row/motor
Variable Rate Control	Opt. manual rate bump & Rx maps w/ OEM Motors	Manual rate bump standard w/ opt. upgrade to Rx maps	Manual rate bump standard w/ opt. upgrade to Rx maps	Manual rate bump standard w/ opt. upgrade to Rx maps
Optional Product Control	Up to 4 prod./4 sec.	Up to 4 prod./4 sec.	Up to 4 prod./4 sec.	Up to 4 prod./4 sec.
Planter Fan and Down Pressure	Optional Monitoring/Control	Optional Monitoring/Control	Optional Monitoring/Control	Optional Monitoring/Control
Optional Bin Levels	Up to 5 sensors	Up to 5 sensors	Up to 5 sensors	Up to 5 sensors
Turn Compensation	Optional	Standard	Standard	Standard
Wireless Remote	Optional	Standard	Standard	Standard
Slingshot	Optional	Optional	Optional	Optional
Multi-Hybrid	Optional	N/A	Interplant/Twin Row	Custom Kits

Planter & Seeder Controls

OmniRow®

How To Order

NEW: A Multi-Hybrid field computer software key can be combined with an interplant or twin-row kit to create a full Multi-Hybrid planting system.

Information needed for selection of complete OmniRow® system.

- Tractor make, model and model year
- **Tractor hydraulic flow capacity**
- Planter make, model, model year, number of rows, and row spacing
- Brand and configuration of any row/section shut-off hardware installed on planter
- Grade and type of seed population sensor installed on planter
- Planter metering drive hardware installed on planter

Components needed to install OmniRow® (choose one from each selection)

1. **Field Computer Kit**
   - Envizio Pro™ or Envizio Pro XL™ without GPS
   - Envizio Pro II® with integrated GPS
2. **DGPS Receiver** (Excluded if Envizio Pro II® with internal GPS selected)
   - Phoenix 200™ (WAAS Only)
   - Phoenix 300™ (Scalable up to RTK)
3. **Tractor Components** (Reference Tractor Components Section and Raven drawing 054-5000-001)
   - **Radar Install or Interface Kit** (Optional)
   - **Chassis and Console Harness**
4. **Planter Components Kit** (Reference Raven drawings 054-3001-012 and 054-3XXX-XXX family drawings)
   - **Level I:** Order Base kit, Power/CAN extension, and optional accessory cables
   - **Level II, III and IV:** Order model or brand–specific hardware kit and optional accessory cables
   - **Level III Configurations:** Kits are configured with 2 or 3 rows per motor or with a mix of 1, 2 and 3 rows per motor. Reference the configuration note associated with the model specific kit.
5. **Population Sensors and Cables**
   - A seed sensor harness extension cable may be required for Level 1 and Level 2 systems based on install location of planter control node
   - Raven recommends High-Speed Dickey-John sensors for accurate real time population information
   - John Deere and White factory installed High-Speed sensors **are** supported by OmniRow®
   - CaseIH factory installed High-Speed seed sensors **are** supported by OmniRow®, however will require a new monitoring harness or adaptor cable
   - Kinze and CaseIH factory-installed Mux Bus sensors are **NOT** supported by OmniRow® and will require sensors and harness to be upgraded.
6. **Auxiliary Product Control, Section Control and Accessories**
   - **Clutch Cables** (Optional for Level I systems only)
   - **OEM Hydraulic Drive Motor Interface Cables** (Optional for Level I systems only)
   - **Product and Section Control** (Optional with GEN II nodes, Sidekick Pro and Planter Auxiliary Control Node)
   - **Planter Fan and Down Pressure** (Optional with Planter Auxiliary Node)
   - **Bin Level Monitoring** (Optional with Planter Auxiliary Node)

Planter & Seeder Controls

OmniRow®

How To Order (continued) & Hydraulic Flow Requirements

Components needed to install OmniRow®, continued (choose one from each selection)

7. **Tractor Hydraulic Interface Requirements** (Not Applicable for Level I Systems)
   - Three (3) hydraulic connections required at tractor consisting of one (1) dedicated SCV for pressure and excess oil return and one (1) dedicated 200 PSI MAX low-pressure motor return line. Case drain connection not recommended as return line due to flow restrictions.
   - Or a power beyond pressure connection and low pressure motor return line
8. **Software Upgrade Keys** (Optional)
   - Population Rate Control Key (Only required for Level I OEM Hydraulic Drive option)
   - Additional Product Channels, Single Product VRA and Multi-Product VRA keys
   - Multi-Hybrid Key

Tractor Hydraulic Flow Requirements for OmniRow® drive motors

Note: In addition to OmniRow® drive motors customer will need to take into account hydraulic flow for vacuum fans, bulk deliver fans, toolbar lift, markers, down pressure systems, fertilizer pumps, liquid pumps, OEM hydraulic drives, etc.

Information needed to estimate OmniRow® hydraulic flow requirements

- Quantity of OmniRow® motors
- Maximum Population (seeds/acre)
- Maximum Ground Speed (mph)
- Row Width (inches)
- Gear Reduction at Row Unit (Typical ratio's shown. Validation recommended)
  - 1.47 for John Deere
  - 1.0 For Kinze
  - 2.0 for Case
  - 2.2 for White
- Cells Per Metering Disk (verify for all crops planter is to be used for)

Equation to estimate OmniRow® hydraulic flow requirements

- Hydraulic Flow (GPM) =
  - $$\frac{\text{Motors x Population x Ground Speed x Row Width x Gear Reduction}}{\text{Cells Per Disk x 682,651}}$$

Example estimate of OmniRow® hydraulic flow requirements

- Number of OmniRow® motors = 12
- Maximum Population = 30,000 seeds/acre
- Ground Speed = 4.0 mph
- Row Width = 30 inches
- Gear Reduction at Row Unit
  - 1.47 for John Deere Planter
- Cells Per Metering Disk = 40

$$\textbf{Hydraulic Flow} = \frac{12 \times 30{,}000 \times 4.0 \times 30 \times 1.47}{40 \times 682{,}651} = \textbf{2.3 GPM}$$

Planter & Seeder Controls

OmniRow®

John Deere

Level I OEM Sectiol Base Kit

OmniRow Level I Monitoring Kit	1-117-3001-012	$2,555.00

Level II Raven Sectiol Kits

Notes: Box and Central Commodity System (CCS) options utilize same kits.
If configured with Dual Airbags consult your Raven Sales Specialist.

John Deere 1720 Stack/CCS 12 Row 30" Sectional	1-117-3J12-044	$8,060.00
John Deere 1720 Stack/CCS 16 Row 30" Sectional	1-117-3J16-034	$8,060.00
John Deere 1760 12 Row 30" Sectional	1-117-3J12-034	$8,060.00
John Deere 1770/7200 12 Row 30" Sectional	1-117-3J12-014	$8,060.00
John Deere 1770/7200 16 Row 30" Sectional	1-117-3J16-014	$8,060.00
John Deere 1770NT/CCS 12 Row 30" Sectional	1-117-3J12-024	$8,060.00
John Deere 1770NT/CCS 16 Row 30" Sectional	1-117-3J16-024	$8,060.00

Level III Brand Specific MultiRow Kits

***Wireless remote not included.**

John Deere Brand Specific 2 Motor Kit*	1-117-3001-051	$4,595.00
John Deere Brand Specific 4 Motor Kit*	1-117-3001-052	$6,025.00

Level III MultiRow Kits

Notes: Box and Central Commodity System (CCS) options utilize same kits.
If configured with Dual Airbags consult your Raven Sales Specialist.

John Deere 1720 Stack/CCS 16 Row 30" MultiRow (8x2)	1-117-3J16-032	$11,735.00
John Deere 1770/7200 16 Row 30" MultiRow (1,2,2,3)	1-117-3J16-012	$11,735.00
John Deere 1770/7200 24 Row 30" MultiRow (8x3)	1-117-3J24-012	$13,165.00
John Deere 1770/7200 24 Row 30" MultiRow (1,2,2,2,2,3)	1-117-3J24-013	$17,245.00
John Deere 1770NT/CCS 16 Row 30" MultiRow (8x2)	1-117-3J16-022	$11,735.00
John Deere 1770NT/CCS 24 Row 30" MultiRow (8x3)	1-117-3J24-022	$13,165.00
John Deere 1770NT/CCS 24 Row 30" MultiRow (12x2)	1-117-3J24-023	$17,245.00
John Deere 1790 24 Row 20" MultiRow (12X2)	1-117-3J24-052	$17,245.00
John Deere DB44 24 Row 22" MultiRow (12X2)	1-117-3J24-042	$17,245.00
John Deere DB 60 24 Row 30" MultiRow (8x3)	1-117-3J24-032	$13,165.00
John Deere DB 60 24 Row 30" MultiRow (12x2)	1-117-3J24-033	$17,245.00

Level IV IndiRow Kits

Notes: Box and Central Commodity System (CCS) options utilize same kits.
If configured with Dual Airbags consult your Raven Sales Specialist.

John Deere 1720 Stack/CCS 12 Row 30" IndiRow	1-117-3J12-041	$13,540.00
John Deere 1720 Stack/CCS 16 Row 30" IndiRow	1-117-3J16-031	$18,050.00
John Deere 1760 12 Row 30" IndiRow	1-117-3J12-031	$13,540.00
John Deere 1770/7200 12 Row 30" IndiRow	1-117-3J12-011	$13,540.00
John Deere 1770/7200 16 Row 30" IndiRow	1-117-3J16-011	$18,050.00
John Deere 1770/7200 24 Row 30" IndiRow	1-117-3J24-011	$27,075.00
John Deere 1770NT/CCS 12 Row 30" IndiRow	1-117-3J12-021	$13,540.00
John Deere 1770NT/CCS 16 Row 30" IndiRow	1-117-3J16-021	$18,050.00
John Deere 1770NT/CCS 24 Row 30" IndiRow	1-117-3J24-021	$27,075.00
John Deere DB 60 24 Row 30" IndiRow	1-117-3J24-031	$27,075.00

Planter & Seeder Controls

OmniRow®

Kinze

Level I OEM Sectiol Base Kit

OmniRow Level I Monitoring Kit	1-117-3001-012	$2,555.00

Level II Raven Sectiol Kits

Note: If equipped with Airbags, four Airbag Offset Bracket Kits will need to be ordered.

Kinze 3200/2200 12 Row 30" Sectional	1-117-3K12-014	$8,060.00
Kinze 3660/3600/2600 16 Row 30" Sectional	1-117-3K16-014	$8,060.00
Kinze 3660/3600/2600 12 Row 30" Sectional	1-117-3K12-024	$8,060.00

Level III Brand Specific MultiRow Kits

***Wireless remote not included.**

Kinze Brand Specific 2 Motor Kit*	1-117-3001-053	$4,595.00
Kinze Brand Specific 4 Motor Kit*	1-117-3001-054	$6,025.00

Level III MultiRow Kits

Note: If equipped with Airbags, an Airbag Offset Bracket Kit will need to be ordered for each motor.

Kinze 3660/3600/2600 16 Row 30" MultiRow (8x2)	1-117-3K16-012	$11,735.00
Kinze 3660/3600/2600 12/23-24 Interplant/Twin-Row (12x2)	1-117-3K12-015	$17,245.00
Kinze 2700/3700/ASD 24 Row 30" MultiRow (8x3)	1-117-3K24-012	$13,165.00
Kinze 2700/3700/ASD 24 Row 30" MultiRow (12x2)	1-117-3K24-013	$17,245.00
Kinze 3800/ASD 24 Row 30" MultiRow (8x3)	1-117-3K24-022	$13,165.00
Kinze 3660/3600/2600 16/31-32 Interplant/Twin-Row (16x2)	1-117-3K16-015	$19,290.00

Level IV IndiRow Kits

Note: If equipped with Airbags, an Airbag Offset Bracket Kit will need to be ordered for each row.

Kinze 3200/2200 12 Row 30" IndiRow	1-117-3K12-011	$13,540.00
Kinze 3660/3600/2600 16 Row 30" IndiRow	1-117-3K16-011	$18,050.00
Kinze 3660/3600/2600 ASD 12 Row 30" IndiRow	1-117-3K12-021	$13,540.00
Kinze 2700/3700/ASD 24 Row 30" IndiRow	1-117-3K24-011	$27,075.00
Kinze 3800/ASD 24 Row 30" IndiRow	1-117-3K24-021	$27,075.00

Accessories

Seed Tube Sensor, High Rate	1-422-0000-100	$97.00
Kinze Airbag Bracket Offset Kit	1-117-3001-017	$12.00

Planter & Seeder Controls

OmniRow®

CaseIH

Level I OEM Sectiol Base Kit

OmniRow Level I Monitoring Kit	1-117-3001-012	$2,555.00

Level II Raven Sectiol Kits

CaseIH 1230 12 Row 30" Sectional	1-117-3C12-014	$8,060.00
CaseIH 1200/1240 12 Row 30" Sectional	1-117-3C12-024	$8,060.00
CaseIH 1250 12 Row 30" Sectional	1-117-3C12-034	$8,060.00
CaseIH 1250 16 Row 30" Sectional	1-117-3C16-034	$8,060.00

Level III Brand Specific MultiRow Kits

***Wireless remote not included.**

CaseIH Brand Specific 2 Motor Kit*	1-117-3001-055	$4,595.00
CaseIH Brand Specific 4 Motor Kit*	1-117-3001-056	$6,025.00

Level III MultiRow Kits

Note: If a 1250 is configured with liquid fertilizer coulters, consult your Raven Sales Specialist.

CaseIH 1230 16 Row 30" MultiRow (8x2)	1-117-3C16-012	$11,735.00
CaseIH 1200/1240 16 Row 30" MultiRow (8x2)	1-117-3C16-022	$11,735.00
CaseIH 1250 24 Row 30" MultiRow (8x3)	1-117-3C24-012	$13,165.00

Accessories

CaseIH Seed Tube Sensor, High Rate	1-422-0000-107	$154.00

Planter & Seeder Controls

OmniRow®

AGCO White

Level I OEM Sectiol Base Kit

OmniRow Level I Monitoring Kit	1-117-3001-012	$2,555.00

Level II Raven Sectiol Kits

White 8202/8222 12 Row 30" Rigid/Flex Sectional	1-117-3W12-014	$8,060.00
White 8182 12 Row 30" Sectional	1-117-3W12-034	$8,060.00
White 8186 16 Row 30" Sectional	1-117-3W16-014	$8,060.00

Level III Brand Specific MultiRow Kits

***Wireless remote not included.**

White Brand Specific 2 Motor Kit*	1-117-3001-057	$4,595.00
White Brand Specific 4 Motor Kit*	1-117-3001-058	$6,025.00

Level III MultiRow Kits

Note: If 8824 NT is configured with rear hitch, consult with your Raven Sales Specialist.

White 8516 16 Row 30" MultiRow (1,2,2,3)	1-117-3W16-022	$11,735.00
White 8816 NT 16 Row 30" MultiRow (1,2,2,3)	1-117-3W16-042	$11,735.00
White 8816 NT 16 Row 30" MultiRow (8x2)	1-117-3W16-043	$11,735.00
White 8524 24 Row 30" MultiRow (8x3)	1-117-3W24-012	$13,165.00
White 8524 24 Row 30" MultiRow (1,2,2,2,2,3)	1-117-3W24-013	$17,245.00
White 8824 NT 24 Row 30" MultiRow (8x3)	1-117-3W24-022	$13,165.00
White 8824 NT 24 Row 30" MultiRow (12x2)	1-117-3W24-023	$17,245.00

Planter & Seeder Controls

OmniRow®

Extension Cables

Power/CAN Extension Cables

12′ Power/CAN Extension Cable	1-115-3001-085	$395.00
20′ Power/CAN Extension Cable	1-115-3001-086	$453.00
24′ Power/CAN Extension Cable	1-115-3001-087	$361.00
28′ Power/CAN Extension Cable	1-115-3001-088	$535.00
32′ Power/CAN Extension Cable	1-115-3001-089	$560.00
36′ Power/CAN Extension Cable	1-115-3001-090	$585.00
40′ Power/CAN Extension Cable	1-115-3001-091	$595.00

Planter Seed Sensor Harness Extension Cables

5′ Seed Sensor Harness Extension Cable	1-115-3001-051	$164.00
20′ Seed Sensor Harness Extension Cable	1-115-3001-052	$219.00

Accessory Cables

John Deere Row Command Clutch Adapter Cable (up to 16 rows)	1-115-3001-054	$273.00
John Deere Row Command Clutch Adapter Cable (up to 24 rows)	1-115-3001-092	$273.00
Universal 16 Clutch Adapter Cable (air/electric)	1-115-3001-063	$327.00
Planter Section Control Adapter Cable	1-115-3001-046	$251.00
OEM Electric Clutch Adaptor Cable (up to 4 clutches)	1-115-3001-064	$327.00
Deere/Dickey-John Hydraulic Motor Control Adapter Cable	1-115-3001-053	$164.00
Kinze Hydraulic Motor Control Adapter Cable	1-115-3001-067	$164.00
White Hydraulic Motor Control Adapter Cable	1-115-3001-117	$164.00
Case IH Hydraulic Motor Control Adapter Cable	1-115-3001-084	$164.00
Remote Switch Extension Cable, 10′	1-115-0171-448	$95.00
Remote Switch Extension Cable, 20′	1-115-0171-501	$97.00
OmniRow 8 Row 40″ Seed Sensor Monitoring Harness	1-115-3001-138	$399.00
OmniRow 12 Row 30″ Seed Sensor Monitoring Harness	1-115-3001-069	$555.00
OmniRow 16 Row 30″ Seed Sensor Monitoring Harness	1-115-3001-070	$715.00

Motor Return Kits

John Deere High Flow Motor Return Kit (3/4" M & F Couplers)	1-117-3002-080	$92.00
John Deere Standard Flow Motor Return Kit (1/2" F Coupler)	1-117-3002-081	$46.00
Case IH Motor Return Coupler (3/4" M Coupler)	1-117-3002-079	$57.00

Planter & Seeder Controls

OmniRow®

Replacement Parts

OmniRow Hydraulic PWM Valve/Body	1-063-0131-140	$162.00
Pressure Reducing Manifold, Low Flow	1-063-0131-141	$500.00
Pressure Reducing Manifold, High Flow	1-063-0131-142	$555.00
OmniRow Planter Node	1-063-3001-001	$2,400.00
Cable, OmniRow Level 1 CAN Node	1-115-3001-045	$1,095.00
Cable, OmniRow Level 2 CAN Node	1-115-3001-065	$1,095.00
Kit, Remote Section Control	1-117-0171-224	$995.00
Magnetic Mount Proximity Switch Kit	1-117-0171-298	$133.00
Kit, Raven CAN Node Magnetic Mount	1-117-0171-299	$40.00
OmniRow Hydraulic Motor Seal Kit	1-117-3001-019	$81.00
OmniRow Hydraulic Motor Sensor Connector Kit	1-117-3001-020	$17.00
Black Nylon Hex Rod, 7/8" x 14.5"	1-211-0002-001	$28.00
OmniRow Hydraulic Motor	1-416-8000-001	$605.00
Seed Tube Sensor, High Rate	1-422-0000-100	$97.00
OmniRow Hydraulic Motor Speed Sensor	1-422-0000-101	$128.00
Planter and Seeder Auxiliary Monitoring Node	1-063-3001-005	$665.00
Planter and Seeder Auxiliary Control Node	1-063-3001-006	$1,330.00
Vacuum and Pressure Sensor (0-5 PSI)	1-063-0173-424	$92.00
Cable, Adapter, Bin/Air, Pressure/Vac	1-115-3001-123	$64.00
OmniMotor Hydraulic Motor Side Cover	1-117-3001-089	$133.00
Cable, Planter/Seeder Auxiliary Monitoring Node	1-115-3001-108	$399.00
Cable, Planter/Seeder Auxiliary Control Node	1-115-3001-109	$725.00

Planter Auxiliary Monitoring & Product Control

Node, CAN Single Product Control	1-063-0173-304	$730.00
Single Product Node Mounting Kit	1-117-0171-299	$40.00
Kit, Planter Auxiliary Monitoring Node	1-117-3001-047	$1,050.00
Kit, Planter Auxiliary Control Node	1-117-3001-048	$1,940.00
Key, Planter and Seeder Auxiliary Control Node	1-077-0180-071	$650.00

Planter Auxiliary Sensors

Vacuum and Pressure Sensor Kit (0-5 PSI)	1-117-3001-045	$179.00
Bin Level Sensor	1-412-6000-008	$148.00
Liquid Pressure Transducer (0 – 250 PSI)	1-422-0000-090	$272.00
Hydraulic Pressure Transducer (0-3000 PSI)	1-422-0000-093	$258.00
Air Pressure Transducer (0-150PSI)	1-422-0000-113	$261.00

Planter & Seeder Controls

OmniRow®

Planter Auxiliary Monitoring & Product Control

Planter Auxiliary Monitoring & Control Cables

Cable, Single Product Node, 37 Pin GEN II	1-115-0172-053	$485.00
Cable, Planter/Seeder Auxiliary Sensors, Basic	1-115-3001-112	$192.00
Cable, Planter/Seeder Auxiliary Sensors, Fully Populated	1-115-3001-132	$540.00
Cable, Adapter, Bin/Air, Pressure/Vacuum	1-115-3001-123	$64.00
Cable, Adapter, Planter/Seeder, 37 Pin Product Aux Pass thru	1-115-3001-127	$510.00
Cable, Adapter, Planter/Seeder, 16 Pin Product Aux Pass thru	1-115-3001-110	$357.00
Cable, Planter/Seeder Auxiliary Control Valves, Basic	1-115-3001-111	$192.00
Cable, Planter/Seeder Auxiliary Control Valves, Fully Populated	1-115-3001-131	$352.00
12' 5 Boom Liquid Cable	1-115-0171-315	$254.00
24' 5 Boom Liquid Cable	1-115-0171-316	$308.00
12' 10 Boom Liquid Cable	1-115-0171-313	$358.00
24' 10 Boom Liquid Cable	1-115-0171-314	$440.00
21' Single Section Granular Cable	1-115-0172-014	$221.00
21' 5 Section Granular Cable	1-115-0171-365	$330.00
12' 4 Section, Planter Liquid Cable, 37 Pin (Fast Valves)	1-115-3001-126	$214.00
12' 4 Section, Electric Liquid Pump Cable, 37 Pin (15 Amp Max)	1-115-3001-128	$384.00
12' Auxiliary 2 Products Cable	1-115-0172-005	$590.00
6' 3 Boom Liquid Cable, 16 Pin	1-115-0159-858	$151.00
12' 3 Boom Liquid Cable, 16 Pin	1-115-0171-055	$193.00
6' 6 Boom Liquid Cable, 16 Pin	1-115-0171-086	$207.00
12' 6 Boom Liquid Cable, 16 Pin	1-115-0171-129	$224.00
12' 4 Section Planter Liquid Cable, 16 Pin	1-115-3001-125	$275.00
Adapter Cable, Fast Valve to OmniRow PWM Valve	1-115-0172-055	$84.00
Adapter Cable, Fast Valve to Raven Standard Valve	1-115-0171-857	$80.00
Adapter Cable, Raven Standard Valve to OmniRow PWM Valve	1-115-3001-104	$32.00

Auxiliary Monitoring & Control Extension Cables

5' Product Control Extension Cable, 37 PIN	1-115-0171-418	$373.00
12' Product Control Extension Cable, 37 PIN	1-115-0171-319	$384.00
24' Product Control Extension Cable, 37 PIN	1-115-0171-320	$394.00
12' Product Control Extension Cable, 16 PIN	1-115-0159-856	$186.00
24' Product Control Extension Cable, 16 PIN	1-115-0159-857	$205.00
30' Pressure/Vacuum Sensor Extension Cable	1-115-0171-616	$79.00
42' Pressure/Vacuum Sensor Extension Cable	1-115-0171-615	$93.00
70' Pressure/Vacuum Sensor Extension Cable	1-115-0171-527	$149.00
10' Bin Level Extension Cables	1-115-0171-448	$95.00
20' Bin Level Extension Cables	1-115-0171-501	$97.00
6' Down Pressure Sensor Cable	1-115-0171-235	$65.00
12' Down Pressure Sensor Cable	1-115-0171-151	$71.00
37' Down Pressure Sensor Cable	1-115-0171-224	$110.00
44' Down Pressure Sensor Cable	1-115-0171-296	$115.00
6' Flow Extension Cable	1-115-0159-016	$58.00
12' Flow Extension Cable	1-115-0159-017	$62.00
24' Flow Extension Cable	1-115-0159-019	$75.00
36.5' Flow Extension Cable	1-115-0171-544	$95.00

Planter & Seeder Controls

OmniRow®

Planter Auxiliary Monitoring & Product Control

Power/CAN Extension Cables

12′ Power/CAN Extension Cable	1-115-3001-085	$395.00
20′ Power/CAN Extension Cable	1-115-3001-086	$453.00
24′ Power/CAN Extension Cable	1-115-3001-087	$361.00
28′ Power/CAN Extension Cable	1-115-3001-088	$535.00
32′ Power/CAN Extension Cable	1-115-3001-089	$560.00
36′ Power/CAN Extension Cable	1-115-3001-090	$585.00
40′ Power/CAN Extension Cable	1-115-3001-091	$595.00

Power/CAN T Extension Cables

12″ Power/CAN Implement Tee Cable	1-115-0171-928	$232.00
6′ Power/CAN Implement Tee Cable	1-115-0171-951	$284.00
12′ Power/CAN Implement Tee Cable	1-115-0171-916	$310.00
24′ Power/CAN Implement Tee Cable	1-115-0171-917	$361.00
36′ Power/CAN Implement Tee Cable	1-115-0171-934	$439.00

Planter & Seeder Controls

OmniSeed™

Raven OmniSeed™ Air Seeder Control Systems

The Raven OmniSeed™ Series of air seeder controls provides an integrated platform for air cart monitoring, remote tank calibration, granular product control, liquid/NH_3 product control, section overlap control, run blockage, real time down pressure monitoring and variable rate control on up to 5 products. OmniSeed™ utilizes the Viper Pro™ and Envizio Pro (II/XL) field computer to deliver a highly configurable system to best fit budget and feature requirements. In addition to advanced seeder controls, the OmniSeed™ system is easily expanded to include Raven RTK level guidance, high speed internet access, wireless data transfer, and remote field computer support through the Slingshot® family of products.

Base Kits

OmniSeed™ base kits consist of an Air Cart Node, Hydraulic motor(s), Hydraulic Control Valve(s), low level bin sensor, and necessary cart cables. Base kits are generic by design and will need brand specific install kits to interface hydraulic motors with air cart meters. Model specific hydraulic hoses **ARE NOT** provided by Raven and will need to be sourced by dealer and/or customer. When combined with a Viper Pro™ or Envizio Pro ((II/XL), GPS and a Raven CAN SwitchBox™, OmniSeed™ base kits will support the following functionality:

- Granular product control for 1to 5 bins (manual or VRA based on field computer and software keys)
- Monitor two fan speeds
- Single section overlap control
- Low level bin detection for each bin

Accessories

OmniSeed™ base kits can be upgraded with the following accessories:

- Remote Tank Console
- Up to 5 variable rate products with the appropriate software keys
- Dual loop run blockage powered by Agtron.
    - System can interface with up to 120 sensors per loop.
- Ultrasonic sensors for bin level monitoring
- Remote implement switch
- Real time down pressure monitoring
- Bin Pressure Monitoring
- Multi-Product control system powered by Raven AccuBoom™ and AccuFlow™ technology. System can be configured as follows:
    A. Control **1** Liquid Product with up to **12** shut-off sections
    B. **OR** Control **2** Liquid Products with up to **6** shut-off sections each or up to **12** shut-off sections total
    C. **OR** Control **1** AccuFlow™/AcuFlow HP™ with up to **6** shut-off sections (Down Pressure Not Supported)
    D. **OR** Control **1** Liquid Product and **1** AccuFlow System with up to **6** shut-off sections each

Planter & Seeder Controls

OmniSeed™

How to Order an OmniSeed™ System

Information needed for selection of complete OmniSeed™ system.

- Tractor make, model and model year
- Air Cart make, model, model year, and number of bins

Components needed to install OmniSeed™ (choose one from each selection)

1. **Field Computer and CAN SwitchBox Kit**
   - Viper Pro™ or Envizio Pro (II/XL) combined with appropriate SwitchBox Kit
2. **DGPS Receiver** (Not required with Envizio Pro II® w/integrated GPS)
   - Phoenix 200™ (WAAS Only)
   - Phoenix 300™ (Scalable up to RTK)
3. **Tractor Components** (drawing 054-5000-001)
   - Chassis and console harness
4. **Generic Air Cart Base Kit** (reference drawing 054-5002.001)
   - Select kit based on number of granular bins. Kit includes air cart node, generic cart cables, 2 fan sensors, hydraulic motors with encoders, and hydraulic control valves.
5. **Brand Specific Install Kits** (Order one kit per bin)
   - Kits provide necessary brackets, hardware and shaft adaptors to install motors onto air cart. Hydraulic hoses are **NOT** included.
   - Bourgault air carts applying more than 75 lbs/acre *(84 kg/ha)*will need a high rate add-on kit
   - Morris Carts applying less than 5 lbs/acre *(6 kg/ha)*will need a low rate add-on kit
6. **Air Cart Accessories** (Optional)
   - **Ultrasonic sensor for bin level monitoring** (Order one kit per bin)
   - **Remote master switch** (Select pressure or proximity switch and extension cable)
   - **Remote Tank Console Kit**
   - **Bin Pressure Sensors** (Select bin pressure cable and one sensor kit per bin)
7. **Run Blockage Powered By Agtron** (Optional)
   - Select single loop run blockage base kit (reference drawing 054-5002-002)
   - Select 2nd loop run blockage kit to upgrade base kit for dual loop monitoring functionality
   - Select diameter and QTY of sensors (Recommend a min of one per manifold)
   - Select additional Agtron Y Cable if installing more than 60 sensors on a loop
   - Maximum of 120 sensors per monitoring loop or up to 240 sensors total
8. **Auxiliary Product Control, Section Control and Down Pressure Monitoring** (Optional)
   - Reference drawing 054-5100-004 for preferred system architecture
   - Select product controller kit and appropriate interface cables
   - Select necessary application control components and extension cables to complete system
   - Select down pressure sensor, node mounting kit and appropriate extension cable
9. **CAN Power/CAN T's and Extension Cables** (Required)
   - Reference drawings 054-5002-001 and select appropriate lengths of extension cables.
10. **Tractor Hydraulic Requirements**
    - Hydraulic flow for motors tee into hydraulic fan pressure and case drain or return lines. Max flow requirements of each motor is 1.0 GPM (4.5 LPM)
11. **Software Upgrade Keys**
    - OmniSeed™ Access Key (Required and included with OmniSeed™ Air Cart Base Kits)
    - Viper Pro™ Multi Product Variable Rate Key (Optional)

Planter & Seeder Controls

OmniSeed™

Generic OmniSeed Air Cart Kits

OmniSeed 1-Bin Generic Install Kit	1-117-3001-035	$4,800.00
OmniSeed 2-Bin Generic Install Kit	1-117-3001-036	$5,715.00
OmniSeed 3-Bin Generic Install Kit	1-117-3001-026	$6,635.00
OmniSeed 4-Bin Generic Install Kit	1-117-3001-027	$7,860.00
OmniSeed 5-Bin Generic Install Kit	1-117-3001-028	$8,780.00

Brand Specific Air Cart Install Kits (Select One Kit per bin)

Bourgault Air Cart Base Motor Install Kit	1-117-3001-034	$128.00
Bourgault Air Cart High Rate Add-On Kit	1-117-3001-040	$540.00
Morris Air Cart Motor Install Kit	1-117-3001-032	$128.00
Morris Air Cart Low Rate Add-On Kit	1-117-3001-041	$540.00
John Deere Air Cart Motor Install Kit	1-117-3001-031	$154.00
CaseIH, Flexi-Coil and New Holland Air Cart Install Kit	1-117-3001-033	$128.00
Horsch-Anderson Install Kit	1-117-3001-050	$770.00

Air Cart Accessories

Bin Pressure Cable	1-115-3001-107	$192.00
Remote Tank Console Kit	1-117-0171-302	$565.00
Remote Master Proximity Switch	1-117-0171-298	$133.00
Remote Master Pressure Switch	1-117-3001-039	$358.00
Ultrasonic Sensor Bin Level Kit (One per bin)	1-117-3001-038	$424.00
Bin Pressure/Vacuum Sensor Kit (One per bin)	1-117-3001-045	$179.00

Run Blockage Powered By Agtron (Reference Raven drawing 054-5002-002)

Agtron Single Loop Run Blockage Base Kit	1-117-3001-023	$1,990.00
Agtron 2nd Loop Run Blockage Kit	1-117-3001-037	$464.00
Agtron Y Cable	1-115-3001-097	$96.00
Agtron 10′ Extension Cable	1-115-3001-095	$76.00
Agtron 20′ Extension Cable	1-115-3001-096	$91.00
Agtron Run Blockage Sensor, 7/8″ Diameter	1-422-0000-104	$102.00
Agtron Run Blockage Sensor, 15/16″ Diameter	1-422-0000-105	$102.00
Agtron Run Blockage Sensor, 1.0″ Diameter	1-422-0000-102	$102.00
Agtron Run Blockage Sensor, 1.25″ Diameter	1-422-0000-103	$102.00
Stainless Steel Worm Drive Clamp	1-435-3003-004	$1.15
Agtron 2′ Sensor Loop Extension Cable	1-115-3001-098	$17.00
Agtron 4′ Sensor Loop Extension Cable	1-115-3001-099	$21.00
Agtron 10′ Sensor Loop Extension Cable	1-115-3001-100	$27.00
Agtron 20′ Sensor Loop Extension Cable	1-115-3001-101	$39.00

Auxiliary Product Control (Reference Raven drawing 054-5100-004)

Multi Product Liquid/Granular Product Controller Kit	1-117-5100-004	$2,045.00
12′ 5 Boom Liquid Cable	1-115-0171-315	$254.00
24′ 5 Boom Liquid Cable	1-115-0171-316	$308.00
12′ 10 Boom Liquid Cable	1-115-0171-313	$358.00
24′ 10 Boom Liquid Cable	1-115-0171-314	$440.00
21′ Single Section Granular Cable	1-115-0171-365	$330.00
12′ Single Section NH3 Cable	1-115-0171-809	$322.00
12′ 8 Section NH3 Cable w/Master Valve	1-115-3001-083	$605.00

Planter & Seeder Controls

OmniSeed™

Down Pressure Monitoring (Reference Raven drawing 054-5100-004)

3000 PSI Down Pressure Transducer	1-422-0000-093	$258.00

Extension Cables

Auxiliary Product Control Extension Cables

Note: Reference drawings 054-3001-012 and 054-5002-001.

5′ Product Control Extension Cable, 37 PIN	1-115-0171-418	$373.00
12′ Product Control Extension Cable, 37 PIN	1-115-0171-319	$384.00
24′ Product Control Extension Cable, 37 PIN	1-115-0171-320	$394.00

Down Pressure/Proximity Switch Extension Cables

10′ Down Pressure/Proximity Switch Extension Cable	1-115-0171-448	$95.00
20′ Down Pressure/Proximity Switch Extension Cable	1-115-0171-501	$97.00

Power/CAN Extension Cables

12′ Power/CAN Extension Cable	1-115-3001-085	$395.00
20′ Power/CAN Extension Cable	1-115-3001-086	$453.00
24′ Power/CAN Extension Cable	1-115-3001-087	$361.00
28′ Power/CAN Extension Cable	1-115-3001-088	$535.00
32′ Power/CAN Extension Cable	1-115-3001-089	$560.00
36′ Power/CAN Extension Cable	1-115-3001-090	$585.00
40′ Power/CAN Extension Cable	1-115-3001-091	$595.00

Power/CAN 'T' Extension Cables

12″ Power/CAN Implement Tee Cable	1-115-0171-928	$232.00
6′ Power/CAN Implement Tee Cable	1-115-0171-951	$284.00
12′ Power/CAN Implement Tee Cable	1-115-0171-916	$310.00
24′ Power/CAN Implement Tee Cable	1-115-0171-917	$361.00
36′ Power/CAN Implement Tee Cable	1-115-0171-934	$439.00

Viper Pro Software

Viper Pro Multi Product Variable Rate Key	1-077-0171-152	$1,000.00
Viper Pro Air Seeder Access Key	1-077-0180-070	$750.00

Planter & Seeder Controls

OmniSeed™

Replacement Parts

Viper Pro Air Seeder Operation Manual	1-016-3001-015	$21.00
Viper Pro Air Seeder Quick Reference Guide	1-016-3001-016	$16.00
OmniSeed Air Cart CAN Node	1-063-3001-007	$1,635.00
OmniSeed Hydraulic Motor	1-416-8000-001	$605.00
OmniSeed Hydraulic Motor Speed Sensor	1-422-0000-101	$128.00
OmniSeed Hydraulic Motor Seal Kit	1-117-3001-019	$81.00
OmniSeed Hydraulic Sensor Connector Kit	1-117-3001-020	$17.00
Pressure Reducing Manifold, Low Flow	1-063-0131-141	$500.00
OmniSeed Hydraulic PWM Valve/Body	1-063-0131-144	$158.00
Air Cart Node 3 Bin Cable	1-115-3001-025	$1,390.00
Air Cart Node 5 Bin Cable	1-115-3001-105	$1,705.00
Agtron Run Blockage CAN Node	1-063-0173-352	$1,075.00
Agtron CAN Node Cable	1-115-3001-102	$530.00
Agtron Run Blockage Y Cable	1-115-3001-097	$96.00
Sensor, Bin Level Low Level	1-412-6000-008	$148.00
Fan Sensor Kit	1-117-0159-575	$107.00
Magnetic Mount Proximity Switch Kit	1-117-0171-298	$133.00
Magnetic Mount Universal Raven CAN Node Kit	1-117-0171-299	$40.00
Bin Low Level Sensor	1-412-6000-008	$148.00
Bin Pressure/Vacuum Sensor (0- 5 PSI)	1-063-0173-424	$92.00
Bin Pressure Sensor Cable	1-115-3001-123	$64.00
Pilot Drill Bit (Bin Level Sensor)	1-321-0000-388	$10.00
30 MM Hole Saw (Bin Level Sensor)	1-321-0000-389	$20.00

Planter & Seeder Controls

AccuRow™

The Raven AccuRow™ Series of planter controls provides an integrated platform for row/section shutoff and vehicle guidance. AccuRow™ utilizes the Cruizer II™ , Envizio Pro ™, Envizio Pro II®, or Viper Pro ™ console and supports up to 4 sections of factory installed half, third or quarter width electric disconnect clutches or up to 16 sections of row mounted air/electric clutches. The Base AccuRow™ system kit includes the core components and will need a hitch Power/CAN extension cable and accessory cables to interface with factory installed disconnect clutches or third party air/electric clutches.

Components needed to install AccuRow™ (choose one from each selection):

1. **Field Computer Kit**
   - Cruizer II™ Kit
   - Envizio Pro™ Kit
   - Envizio Pro II® Kit
   - Viper Pro™ Kit

2. **Tractor Components** (reference drawing 054-5000-001)
   - Chassis and console harness

3. **AccuRow Base Kit**

4. **Power/CAN Extension Cable** (order based on distance from hitch pin to node install location)

5. **Accessory Cables** (reference Raven drawing 054-3001-016)
   - **Clutch Interface Cables**

Planter & Seeder Controls

AccuRow™

Kits, AccuRow™

Base AccuRow System Kit	1-117-3001-016	$1,490.00

Extension Cables, AccuRow™

Power/CAN Extension Cables

12′ Power/CAN Extension Cable	1-115-3001-085	$395.00
20′ Power/CAN Extension Cable	1-115-3001-086	$453.00
24′ Power/CAN Extension Cable	1-115-3001-087	$361.00
28′ Power/CAN Extension Cable	1-115-3001-088	$535.00
32′ Power/CAN Extension Cable	1-115-3001-089	$560.00
36′ Power/CAN Extension Cable	1-115-3001-090	$585.00
40′ Power/CAN Extension Cable	1-115-3001-091	$595.00

Accessory Cables

John Deere Row Command Clutch Adapter Cable (up to 16 rows)	1-115-3001-054	$273.00
John Deere Row Command Clutch Adapter Cable (up to 24 rows)	1-115-3001-092	$273.00
OEM Electric Clutch Adapter cable (up to 4 clutches)	1-115-3001-064	$327.00
Universal 16 Clutch Adapter Cable	1-115-3001-063	$327.00

Replacement Parts

AccuRow Planter Node	1-063-0172-985	$705.00
AccuRow Cable	1-115-3001-071	$565.00
Magnetic Mount Proximity Switch Kit	1-117-0171-298	$133.00

Planter & Seeder Controls

CropStart™

Kits, CropStart™

Complete Manual CropStart Kit (8 Row)	1-117-0159-826	$1,175.00
Complete CropStart II Kit (8 Row)	1-117-0159-831	$2,810.00
Flow Monitor 4 Row Add-On Kit	1-117-0159-830	$79.00
Manifold Valve Add-On Kit	1-117-0159-832	$266.00

Cables/Components, CropStart™

CropStart Manual System (Console Only)	1-063-0172-222	$366.00
CropStart 40' Product Cable	1-115-0171-261	$187.00
Remote Switch Assembly	1-063-0172-037	$202.00
Pump Assembly	1-063-0172-138	$266.00

Cables/Components, CropStart II™

15' Console Cable	1-115-0171-267	$293.00
40' Product Cable	1-115-0171-268	$320.00
40' Extension Cable	1-115-0171-360	$320.00
CropStart II Automatic System (Console Only)	1-063-0172-241	$895.00
Remote Switch Assembly	1-063-0172-037	$202.00
Boom Valve Single Manifold	1-063-0171-926	$184.00
Pump Assembly	1-063-0172-138	$266.00
Stand Assembly	1-063-0172-243	$900.00
RFM 15 (.3-15 GPM Poly) M200 Flanged	1-063-0172-040	$292.00

Manuals, CropStart™

CropStart II Manual	1-016-0159-889	$17.00
CropStart Manual	1-016-0159-887	$17.00

Harvest Controls

SmartYield™ Pro

Raven SmartYield™ Pro Yield Monitoring System

For producers who want to confirm their profitability, the Raven SmartYield™ Pro yield monitor accurately records and displays crop and moisture data. SmartYield™ Pro runs seamlessly on the Envizio Pro™ series field computer which can be expanded to include RTK level guidance, high speed internet access, wireless data transfer, and remote field computer support through the Slingshot® family of products.

Components needed to install SmartYield™ Pro (choose one from each selection)

1. **Field Computer Kit**
   - Envizio Pro™ or Envizio Pro XL without GPS
   - Envizio Pro II® with integrated GPS
2. **DGPS Receiver** (Excluded if Envizio Pro™ with internal GPS selected)
   - Phoenix 200™ (WAAS Only)
   - Phoenix 300™ (Scalable up to RTK)
3. **SmartYield™ Pro Kit**
   - Select the generic Yield and Moisture Sensor Kit for most makes and models
   - Select the Claas/Lexion kit for machines with factory installed optical sensors
   - Select the SmartYield™ Pro Upgrade kit to update older SmartYield™ Junction Box installations
4. **Combine Console and Power Harness** (Reference Application Drawing 054-9000-002)
   - Select a combine console cable
   - Select appropriate length power extension cable
5. **Header Height Sensor** (Reference Application Drawing 054-9000-007)
   - If combine is equipped with a factory header height sensor simply select brand specific tee cable
   - Select Universal Rotary sensor kit if combine is **NOT** equipped with header height sensor
6. **Accessories** (Recommended but not required)
   - SmartYield™ Pro Installation Tool Kit
   - Installation Kit to install a grain moisture sensor on the combine bubble-up auger (Optional)

Harvest Controls

SmartYield™ Pro

Kits, SmartYield™ Pro

SmartYield to SmartYield Pro Upgrade Kit	1-117-9000-003	$2,500.00
SmartYield Pro Yield and Moisture Sensor Kit	1-117-9000-002	$3,900.00
SmartYield Pro Claas/Lexion w/Factory Yield Sensor Kit	1-117-9000-011	$3,300.00

Combine Console and Power Harness

Combine Console Cable	1-115-9000-009	$580.00
2′ Combine Console Power Extension Cable	1-115-9000-012	$75.00
12′ Combine Console Power Extension Cable	1-115-9000-013	$90.00
20′ Combine Console Power Extension Cable	1-115-9000-014	$110.00

Components, Header Height Sensor

Combine Universal Rotary Sensor Kit	1-117-9000-007	$175.00
AMP Superseal Header Height Sensor Tee Cable	1-115-9000-016	$75.00
Deutsch DT Superseal Header Height Sensor Tee Cable	1-115-9000-017	$75.00
Deutsch DTM Header Height Sensor Tee Cable	1-115-9000-018	$75.00
Weatherpack w/Female Pins Header Height Sensor Tee Cable	1-115-9000-019	$75.00
Weatherpack w/Male Pins Header Height Sensor Tee Cable	1-115-9000-021	$75.00
AMPSeal Header Height Sensor Tee Cable	1-115-9000-023	$75.00

Replacement Parts/Accessories

SmartYield Pro Installation Tool Kit	1-117-9000-009	$135.00
Combine Bubble-Up Auger Grain Moisture Installation Kit	1-117-9000-012	$65.00
SmartYield Junction Box	1-063-0173-283	$3,500.00
SmartYield Pro Node	1-063-9000-002	$2,000.00
SmartYield Pro Node Cable	1-115-9000-010	$400.00
SmartYield Pro Installation Manual	1-016-0171-566	$15.00
SmartYield Pro Calibration and Operation Manual	1-016-0171-567	$15.00
Combine Grain Moisture Sensor Kit	1-117-9000-008	$750.00
Yield Sensor Wired Pair	1-063-9000-006	$300.00
Yield Sensor Lens Assembly	1-063-9000-001	$100.00
Grain Test Weight Scale	1-321-0000-428	$98.00
Yield Sensor Bracket Kit	1-117-0171-475	$95.00
Raven CAN Node Universal Magnetic Mount Kit	1-117-0171-299	$40.00
SmartYield Paddle Extension Tab Kit	1-117-0171-462	$150.00
SmartYield Pro Installation Bit Replacement Kit	1-117-9000-010	$58.00

Replacement Parts

***Different discounts apply**

MAN CAN AUTOBM CAL & CONTROL	1-016-0130-062	$26.00
MAN ISO CAN AUTOBOOM CAL	1-016-0130-065	$41.00
MAN RGL 600 QUICKSTART	1-016-0159-856	$4.75
MANUAL CROPSTART	1-016-0159-887	$17.00
MAN CROPSTART II CONSOLE	1-016-0159-889	$17.00
MANUAL RGL 600 SMARTBAR	1-016-0159-936	$9.20
MANUAL SMARTRAX CONTROLLER	1-016-0159-956	$15.00
QUICK START GUIDE SMARTRAX	1-016-0159-982	$6.95
MANUAL TM-1 TILT SENSOR	1-016-0171-049	$15.00
MANUAL PHOENIX 200 GPS RCVR	1-016-0171-059	$16.00
MANUAL PHOENIX 300 GPS RCVR	1-016-0171-060	$9.20
MANUAL VPRO	1-016-0171-122	$20.00
VPRO QUICK REFER GUIDE	1-016-0171-147	$13.00
MANUAL EPRO & EPRO II	1-016-0171-148	$20.00
QRG EPRO & EPRO II	1-016-0171-149	$16.00
MAN INST PHOENIX 50	1-016-0171-211	$6.55
MAN INST PHOENIX 10	1-016-0171-215	$6.30
MAN ISOBUS PROD CNTRL	1-016-0171-362	$26.00
GUIDE CRZR II WR	1-016-0171-364	$9.40
MAN EPRO PLNTR CNTRL	1-016-0171-405	$23.00
QRG EPRO PLNTR CNTRL	1-016-0171-406	$15.00
GUIDE CRZR II	1-016-0171-415	$9.40
MAN RAVEN OPERATING SYSTEM	1-016-0171-539	$21.00
MAN OPERATION OMNISEED	1-016-3001-015	$21.00
VALVE MODIFIED ROPE HOLE	1-019-0159-245	$154.00
MOD 1 1/2" BALL VLV ROPE HOLE	1-019-0159-571	$232.00
SNSR ULTSN PGM	1-063-0130-009	$585.00
NODE CAN CNTRL AUTBM PGLD+	1-063-0130-010	$1,670.00
CONS AUTBM CNTRL	1-063-0130-011	$1,295.00
NODE CAN AUTBM UG	1-063-0130-013	$2,990.00
SNSR ULTSN MOLDED L	1-063-0130-014	$875.00
ECU ISO CAN AUTOBOOM	1-063-0130-016	$2,555.00
SNSR ULSNC DIG 4PIN MLD LEFT	1-063-0130-018	$875.00
CNSL ATBM CNTRL CAN ONLY	1-063-0130-021	$880.00
DRV ASSY PROP VLV G1 RPL ATBM	1-063-0131-101	$422.00
VALVE HYD PWM PLANTER	1-063-0131-140	$162.00
VLV HYD PROP FLOW CNTRL 3 WAY	1-063-0131-144	$158.00
ASSY VLV ELEC REGLTR	1-063-0159-001	$84.00
CONSOLE SCS-203 ASY	1-063-0159-203	$186.00
CONS LIQUID GAUGE 223	1-063-0159-223	$202.00
SENSOR ASY SPEED M81	1-063-0159-438	$159.00
SENSOR ASY SPEED M81	1-063-0159-484	$273.00
SENSOR WD DR SPEED 2 POLE	1-063-0159-539	$238.00
METER RFM-200 FLOW	1-063-0159-574	$990.00
MIXER FLOW ASY 1 1/4NPT	1-063-0159-632	$154.00
SWITCH BOX ASY 10 BM SCS-750	1-063-0159-908	$409.00
CONSOLE ASY SCS-330	1-063-0171-115	$780.00
VALVE ASY 3/4" CONT VAL	1-063-0171-120	$161.00
SENSOR SP 4 POLE WH DR 7 1/2FT	1-063-0171-152	$281.00
CONSOLE ASY 440 SERIAL INTERFA	1-063-0171-183	$1,175.00
CONSOLE ASY 810 FLOW MAX	1-063-0171-214	$740.00
CONSOLE ASY SER INTER 450	1-063-0171-220	$1,350.00
CONSOLE ASY SCS-660 SER INTER	1-063-0171-221	$1,450.00

CONSOLE ASY 460 SER INTERFACE	1-063-0171-249	$1,175.00
CONSOLE ASY DCS400 LIQ DEICE	1-063-0171-272	$1,560.00
MIXER FLOW ASY 2"NPT	1-063-0171-300	$179.00
MIXER FLOW ASY 1" NPT	1-063-0171-303	$154.00
SWITCHBOX 7 BOOM SCS 460/660	1-063-0171-335	$429.00
MONITOR ASY FLOW MAX 110	1-063-0171-357	$404.00
ENCODER GRANULAR 25FT	1-063-0171-443	$287.00
ENCODER DCS DIVIDE BY 10	1-063-0171-701	$262.00
CONSOLE ASY SCS-460 BOOM/LITE	1-063-0171-704	$1,300.00
CONSOLE DCS-700PW	1-063-0171-711	$1,860.00
CONSOLE DCS-710	1-063-0171-736	$2,330.00
FLOW MIXER ASY 1"NPT CAST IRON	1-063-0171-784	$205.00
HYD VALVE PULSE WIDTH MOD 5GPM	1-063-0171-841	$605.00
HYD VALVE PULSE WIDTH MOD10GPM	1-063-0171-842	$615.00
HYD VALVE PULSE WIDTH MOD15GPM	1-063-0171-843	$605.00
HYD VALVE PULSE WIDTH MOD30GPM	1-063-0171-846	$605.00
CONSOLE DLA-336	1-063-0171-855	$1,995.00
VALVE ASSY 1 1/2" 90 DEG FLANG	1-063-0171-894	$292.00
VALVE ASSY 1.5" 360DEG FLANGED	1-063-0171-895	$281.00
ANTENNA MBA-4	1-063-0171-922	$805.00
MNFLD VLV 5 SEC ASSY	1-063-0172-039	$925.00
STAND ASSY CROP START	1-063-0172-243	$900.00
MOTOR CONTROL CAN	1-063-0172-360	$965.00
VALVE FAST 2" S.S. BUTTERFLY	1-063-0172-363	$745.00
TERMINATOR CAN PASSIVE	1-063-0172-369	$106.00
PUMP MOTOR ASSY 3/4" RAVEN	1-063-0172-428	$2,465.00
SENSOR SPEED RAVEN GEARTOOTH	1-063-0172-443	$70.00
SWITCH ASSEMBLY SMARTRAX ENABL	1-063-0172-470	$131.00
ANTENNA MBA-3	1-063-0172-480	$590.00
PUMP/MOTOR 1-40 OZ/MIN	1-063-0172-510	$2,465.00
CONSOLE SCS660 W/MASTER SWITCH	1-063-0172-542	$1,520.00
LIGHTBAR RGL 600IC	1-063-0172-549	$820.00
CAN DIAGNOSTIC ASSEMBLY	1-063-0172-602	$188.00
ANTENNA MBA-6	1-063-0172-651	$795.00
SENSOR YAW	1-063-0172-684	$705.00
5 CHANNEL H-BRIDGE	1-063-0172-753	$414.00
CONTROLLER ASSY SMARTRAX II	1-063-0172-784	$3,035.00
CONSOLE VPRO	1-063-0172-879	$4,995.00
VLV ASSY 2PIN MLD HYD 0-40 GPM	1-063-0172-897	$985.00
CONS SCS 4070	1-063-0172-913	$1,510.00
RECEIVER PHOENIX 50	1-063-0172-914	$740.00
PLATE ASSY ANT MNT	1-063-0172-971	$16.00
VALVE CNTRL 1" BALL NH3	1-063-0172-977	$480.00
VALVE FAST 1" BALL NH3	1-063-0172-979	$550.00
MOTOR ASSY CNTRL VALVE NH3	1-063-0172-980	$281.00
MOTOR ASSY FAST VALVE NH3	1-063-0172-982	$342.00
VLV FAST CNTRL 8GPM HYD #8ORNG	1-063-0173-162	$525.00
VLV FAST 16GPM HYD #10ORNG PRT	1-063-0173-163	$525.00
PMP SDKCK PRO W/CLBRTR 1-40 OZ	1-063-0173-201	$3,175.00
VLV ASSY 1 1/4" BALL SS	1-063-0173-209	$193.00
KIT MDL SDKCK PRO 24GAL 1-40	1-063-0173-212	$3,600.00
KIT MDL SDKCK PRO 24GAL 5-200	1-063-0173-213	$3,600.00
BRKT/VLV ASSY 1" BALL	1-063-0173-256	$200.00
VLV ASSY 1" BALL SS	1-063-0173-257	$163.00
ASSY MIXER 4"	1-063-0173-264	$1,125.00
ASSEMBLY 3" MIXER W/PORTS	1-063-0173-272	$960.00

ASSY NH3 STRAINER YTYPE 1 1/2	1-063-0173-312	$99.00
ASSY SUPER COOLER ENHAN 1 1/2"	1-063-0173-314	$715.00
NODE PROD CONTROLLER LVL1	1-063-0173-341	$790.00
NODE AGTRON BLOCKAGE	1-063-0173-352	$1,075.00
NODE PROD CONTROLLER LVL3	1-063-0173-367	$1,720.00
FLOWMETER RFM 15S	1-063-0173-373	$640.00
VLV FAST 1/4" BALL	1-063-0173-374	$530.00
FLOW MIXER 1 1/4" NPT CASTIRON	1-063-0173-388	$230.00
PUMP INJ ISO SDKCK PRO 5-200	1-063-0173-402	$3,975.00
PUMP INJ ISO SDKCK PRO 1-40	1-063-0173-403	$3,975.00
PUMP ISO SDKCK PRO W/CAL 1-40	1-063-0173-420	$4,235.00
PUMP ISO SDKCK PRO W/CAL 5-200	1-063-0173-421	$4,235.00
MODULE ISO SDKCK PRO 24G 1-40	1-063-0173-422	$4,655.00
MODULE ISO SDKCK PRO 24G 5-200	1-063-0173-423	$4,655.00
MXR FLOW ASSY LOW FLOW 1" NPT	1-063-0173-432	$230.00
CNSL SCS 4400 NO DATALOG	1-063-0173-466	$1,675.00
CNSL SCS 4600 NO DATALOG	1-063-0173-477	$1,630.00
SNSR ASSY LINEAR WH ANG 300MM	1-063-0181-001	$515.00
SNSR ASSY LINEAR WH ANG 450MM	1-063-0181-003	$760.00
SENSOR LINEAR WHL ANGLE W/SLEV	1-063-0181-007	$715.00
SENSOR LIN WHL ANG W/SLV 500MM	1-063-0181-009	$785.00
SNSR ASSY RTRY WHEEL ANG 110D	1-063-0181-013	$810.00
CABLE ASSY ROTARY SENSOR	1-063-0181-014	$104.00
NODE CAN CNTRL PLNTR	1-063-3001-001	$2,400.00
SWBOX CAN RAVEN	1-063-3001-002	$630.00
NODE CAN 5 PROD AIR CART	1-063-3001-007	$1,635.00
KIT CAN SMRTSTR CNTRL 3D CRZR	1-063-4001-013	$820.00
CONSOLE ASY SCS-11 SPRAY CONT	1-070-0159-011	$256.00
CONSOLE ASY SCS-103 SPRAY CONT	1-070-0159-103	$235.00
SOFTWARE CD KEY VIPER GUIDANCE	1-077-0171-151	$560.00
SOFTWARE CD KEY VIPER(MAKE)	1-077-0171-152	$1,000.00
SFTWR CODE AUTH HP/XP-RTK(RT2)	1-077-0180-014	$2,000.00
SFTWR CODE AUTH WAAS-RTK (RT2)	1-077-0180-021	$4,000.00
SFTWR CD KEY VPR WTHR MDL(MAKE	1-077-0180-030	$400.00
SFTWR EPRO VAR RATE KEY(MAKE)	1-077-0180-031	$750.00
SFTWR CODE OEMV GLNSS UPGRD	1-077-0180-032	$1,035.00
SFTWR CODE AUTH CRZR E-DIF	1-077-0180-042	$635.00
SFTWR CODE AUTH EPRO E-DIF	1-077-0180-044	$615.00
SFTWR CODE AUTH 3D SMARTRAX	1-077-0180-056	$1,445.00
KEY AUTH CRZR LOAD CELL	1-077-0180-057	$1,070.00
SFTWR CODE EPRO PLNT POP CNTRL	1-077-0180-058	$750.00
CODE AUTH OEMV-1GR GLNS UPGRD	1-077-0180-061	$530.00
SFTWR CODE EPROII RTK UPGRD	1-077-0180-062	$4,000.00
SFTWR CODE GLONASS UPGRD OEMV2	1-077-0180-064	$520.00
SFTWR CODE PRD CNTRL LVL2 UNLK	1-077-0180-065	$464.00
SFTWR CODE AUTH EPRO MULTIPROD	1-077-0180-066	$500.00
SFTWR CODE AUTH EPRO MULTI VRA	1-077-0180-067	$1,000.00
SFTWR CODE PROD CNTR LVL3 UNLK	1-077-0180-068	$464.00
SFTWR CODE VPRO GEN AIR CART	1-077-0180-070	$750.00
CODE AUTH PLNTR AUX NODE UNLCK	1-077-0180-071	$650.00
CODE AUTH OEM628 UPGRD GLN+RTK	1-077-0180-084	$4,500.00
CODE AUTH UPGRD OEM628 LBND-RT	1-077-0180-086	$4,000.00
CODE AUTH UPGRD WASS-LBND/GLNS	1-077-0180-090	$2,500.00
CODE AUTH UPGRD WASS/GLNS-LBND	1-077-0180-091	$2,000.00
CODE AUTH UPGRD WASS/GLNS-RTK	1-077-0180-092	$4,000.00
CODE AUTH UPGRDE OEM628 WAAS	1-077-0180-120	$2,000.00

CODE AUTH ROS GREEN SEEKER	1-077-0180-123	$500.00
CDE AUTH UPGRDE OEM628 WAAS	1-077-0180-124	$0.00
CDE AUTH UPGRDE OEM628 WAAS	1-077-0180-125	$0.00
CDE AUTH UPGRDE OEM628 WAAS	1-077-0180-126	$0.00
CDE AUTH UPGRDE OEM628 WAAS	1-077-0180-127	$0.00
SFTWR SUBSCR ANNUAL SLINGSHOT	1-077-7000-001	$1,550.00
SFTWR SBSC ANN SLNGSHT MULTIUN	1-077-7000-005	$795.00
SFTWR ACTIVATION SLINGSHOT RTK	1-077-7000-006	$1,000.00
SFTWR WMS BASIC 1 YR LICENSE	1-077-7000-010	$2,375.00
SLINGSHOT CORRECTIONS UNLOCK	1-077-7000-028	$750.00
SLINGSHOT WMS LICENSE 2.0	1-077-7000-029	$1,500.00
SLINGSHOT WMS LICENSE 1.0	1-077-7000-030	$2,400.00
MNT 3" DBL SKT SIZE B	1-103-0001-014	$44.00
BASE 2.5" WITH 1/4-20 STUD	1-103-0001-015	$33.00
BASE BALL MNT RAM TO IPAQ	1-103-0001-016	$33.00
DBL SCKT RAM LENGTH D 1.5 BALL	1-103-0001-031	$37.00
CLAMP RAM RAIL 1.0" BALL	1-103-0001-032	$15.00
CLAMP RAM RAIL 1.5" BALL	1-103-0001-033	$40.00
MNT VAC 4 1/2" 40LB CAP	1-103-0159-007	$68.00
MNT VAC RAM W/DIAMOND BALL BAS	1-103-0159-011	$32.00
FLASK CAL	1-106-0159-454	$87.00
BRACKET SENSOR	1-106-0159-539	$4.60
ARM ULTRASONIC SENSOR	1-106-0159-626	$25.00
LOWER HOUSING ULTRASONIC SENSR	1-106-0159-627	$20.00
COVER ULTRASONIC SENSOR	1-106-0159-628	$20.00
COVER CAL TUBE	1-106-0159-637	$30.00
CABLE EXTENSION 12FT SCS-203	1-107-0159-025	$72.00
BRACKET MOUNTING RFM200	1-107-0159-509	$22.00
BRKT MNT VIPER\4400 STEEL	1-107-0171-415	$37.00
BRACKET MOUNTING RGL 600	1-107-0171-477	$26.00
COUPLER UPPER HYD VALVE	1-107-0171-693	$21.00
COUPLER HYDRAULIC VALVE	1-107-0171-694	$33.00
BRKT MNTG SWITCH PRO TO EPRO	1-107-0171-841	$26.00
PLATE MNTG CLAMP SCS CNSL/SWBX	1-107-0171-958	$28.00
BRKT MNT ISO SWBOX JD	1-107-0172-049	$80.00
BRKT MNT SLNGSHT FLD HUB EPRO	1-107-0172-165	$37.00
PIN MDU ANTI-ROTATION	1-107-4001-004	$26.00
CBL SOL 6FT SCS-203	1-115-0159-013	$63.00
CABLE SOL 12FT SCS-203	1-115-0159-015	$79.00
CABLE FLOWMETER 6 FT 440	1-115-0159-016	$58.00
CABLE FLOWMETER 12 FT 440 ASY	1-115-0159-017	$62.00
CABLE SPEED SEN 24FT 440	1-115-0159-018	$70.00
CABLE FLOWMETER 288" CON-X-ALL	1-115-0159-019	$75.00
CABLE EXT 12FT SPEED SEN	1-115-0159-032	$60.00
CABLE 6′ FLOW CONTROL SCS 440	1-115-0159-404	$117.00
CABLE 12′ FLOW CONTROL SCS 440	1-115-0159-405	$145.00
CABLE 12′ EXT SCS 440	1-115-0159-409	$132.00
CABLE 24′ EXT SCS 440	1-115-0159-414	$161.00
CABLE 10′ CONSOLE SCS 440	1-115-0159-418	$183.00
CABLE ADAPTER RADAR TRW	1-115-0159-432	$126.00
CABLE 19′ CONSOLE SCS 330/340	1-115-0159-437	$261.00
CABLE ADAPTER "Y" SPEED SENSOR	1-115-0159-472	$143.00
CABLE 6′ PRODUCT 7 BM 440/450	1-115-0159-495	$118.00
CABLE 12′ PRODUCT 7 BM 440/450	1-115-0159-496	$156.00
CABLE CORD ASY TURF	1-115-0159-509	$243.00
CABLE RADAR INTERFACE	1-115-0159-517	$132.00

CABLE RADAR ADAPT DJ	1-115-0159-518	$203.00
CABLE ASY RADAR JD MAG	1-115-0159-519	$120.00
CABLE INTER RADAR DJ RII	1-115-0159-526	$107.00
CABLE ADAPT RADAR DJ	1-115-0159-529	$128.00
CABLE 12' POWER RAVEN RADAR	1-115-0159-539	$104.00
CABLE ASY RADAR JD/RII	1-115-0159-550	$100.00
CABLE RII RADAR/CASE IH	1-115-0159-551	$129.00
CABLE RII RADAR DJ CON RII CON	1-115-0159-552	$142.00
CABLE SPEED SENSOR 460	1-115-0159-580	$89.00
CABLE CONVERTOR AGCO TO VALV	1-115-0159-618	$6.40
CABLE RADAR ADAPT DJ CAT	1-115-0159-627	$142.00
CABLE RAD ADAP 7000/8000	1-115-0159-700	$112.00
CABLE ASY 32' EXTERN 330/340	1-115-0159-706	$335.00
CABLE ASY 3'CONS 450/460	1-115-0159-707	$202.00
CABLE ASY FLOW 450/460	1-115-0159-708	$279.00
CABLE RADAR ADAPT FORD GEN/VER	1-115-0159-709	$161.00
CABLE 24' EXT SCS 460/660	1-115-0159-717	$314.00
CABLE RADAR ADAPTER GEN/VER	1-115-0159-754	$100.00
CABLE CONTROL 810 MAX	1-115-0159-762	$138.00
CABLE ASY CONSOLE 810 FLOW MAX	1-115-0159-763	$84.00
CABLE ASY EXT 810 FLOW MAX	1-115-0159-764	$64.00
CABLE CONSOLE 3' 660/460	1-115-0159-786	$244.00
CABLE PRODUCT GRAN 660 21 FT	1-115-0159-787	$298.00
CABLE 10' RS 232 9 PIN	1-115-0159-822	$106.00
CABLE BM/POWER 460/660	1-115-0159-839	$123.00
CABLE 12' EXT 7BM 440/450 WVLV	1-115-0159-856	$186.00
CBL 24' EXT 7BM 440 W/V POWER	1-115-0159-857	$205.00
CABLE 6' FLOW 3BM SCS440	1-115-0159-858	$151.00
CABLE 12' FLOW 3BM SCS 440	1-115-0159-859	$156.00
CABLE CONSOLE 30FT DCS-310	1-115-0159-878	$230.00
CBL ADPT RVN 2PIN-DJ HYD VLV	1-115-0159-884	$37.00
CABLE PRODUCT DCS 400 10FT	1-115-0159-955	$293.00
CABLE PRODUCT DCS-700 PW	1-115-0159-956	$177.00
CABLE CONSOLE DCS-710	1-115-0159-957	$600.00
CABLE CONSOLE DCS 400	1-115-0159-971	$293.00
CABLE FLOW 2' PREWET IOWA	1-115-0171-011	$115.00
CABLE ADAPT DCS GRAN/BRAD HAR	1-115-0171-016	$65.00
CABLE ADAPTER PACKARD/BRAD HAR	1-115-0171-020	$72.00
CBL NULL MODEM 3'	1-115-0171-040	$66.00
CABLE 12' FLOW 3BM PACKARD	1-115-0171-055	$193.00
CABLE CONV DCS400 TO STD VALVE	1-115-0171-060	$18.00
CABLE FAN SENSOR EXTENSION	1-115-0171-070	$40.00
CABLE 10' CONS 7BM SCS 440/450	1-115-0171-085	$199.00
CABLE 6' PROD 6 BM W/VALVE CON	1-115-0171-086	$207.00
CABLE 50' PRODUCT DCS-410	1-115-0171-093	$545.00
CABLE 15' ANT TNC(M)-TNC(M) RT	1-115-0171-117	$75.00
CABLE 12' POWER INVIC 310/210	1-115-0171-118	$46.00
CABLE 6' INVICTA 310/210 TO PC	1-115-0171-119	$80.00
CABLE 12' FLO CONT 6BM BM VLVE	1-115-0171-129	$224.00
CABLE 15' CONSOLE SCS-SIDEKICK	1-115-0171-130	$319.00
CABLE 28' MAIN LGTBAR TO SWBOX	1-115-0171-137	$183.00
CABLE 27' PRODUCT SCS-SIDEKICK	1-115-0171-138	$235.00
CABLE ADAPT NON-RAV TO SIDEKIC	1-115-0171-147	$59.00
CABLE PRESS XDCR SENSOR 144"	1-115-0171-151	$71.00
CABLE PRESS XDCR CONSOLE 120"	1-115-0171-152	$80.00
CABLE PRESS XDCR CONSOLE 36"	1-115-0171-153	$64.00

CABLE ADAPT SIDEKICK JD 47X0	1-115-0171-165	$255.00
CABLE SPEED ADAPT TO PORT B	1-115-0171-166	$255.00
CABLE PRESS XDCR CONSOLE 30'LG	1-115-0171-176	$89.00
CABLE TEE GREENSTAR TO RAVEN	1-115-0171-177	$146.00
CABLE 24' FLOW 460/660 W/V POW	1-115-0171-206	$335.00
CABLE Y-ADAPTER RS232 PORT EXP	1-115-0171-207	$92.00
CABLE 21' 10 BOOM CAN SYSTEMS	1-115-0171-213	$255.00
CABLE 6' INV 100 TO PC W/POWER	1-115-0171-214	$104.00
CABLE 6' INV 110 PORT A TO PC	1-115-0171-215	$104.00
CABLE SPEED ADAPTER RPR110/115	1-115-0171-216	$138.00
CABLE PRESS XDCR SENSOR 444"	1-115-0171-224	$110.00
CABLE EXT SPEED SENSOR 408"	1-115-0171-225	$80.00
CABLE PRESS TRANSDUCER 72" LG	1-115-0171-235	$65.00
CABLE EXT SPEED SENSOR 216"	1-115-0171-239	$65.00
CABLE EXT SPEED SENSOR 348" LG	1-115-0171-241	$75.00
CABLE ADAPT BM SNS LT UP JD	1-115-0171-254	$78.00
CABLE 15' CONSOLE CROPSTART II	1-115-0171-267	$293.00
CABLE 40' PRODUCT CROPSTART II	1-115-0171-268	$320.00
CABLE 12' INVICT 310/210 TO PC	1-115-0171-272	$86.00
CABLE SENSOR INT. NEW LEADER	1-115-0171-277	$199.00
CABLE "Y" ADAPT 2 CONS/SING FL	1-115-0171-282	$160.00
CABLE 50' ANTENNA TNC-TNC 8240	1-115-0171-287	$83.00
CABLE PRESS XDCR SENSOR 528"	1-115-0171-296	$115.00
CABLE 3' CONSOLE SCS 4400	1-115-0171-299	$387.00
CABLE 20' CONSOLE SCS 4400	1-115-0171-300	$487.00
CABLE 12' EXT SCS 460/660	1-115-0171-301	$210.00
CABLE 12' PROD 7BM 3 PIN TOWER	1-115-0171-302	$279.00
CABLE 6' SPEED ADAPTER CASE	1-115-0171-304	$181.00
CABLE 3' PRODUCT SCS SIDEKICK	1-115-0171-305	$155.00
CABLE 12' PROD 10BM 4400/4600	1-115-0171-313	$358.00
CABLE 24' PROD 10BM 4400/4600	1-115-0171-314	$440.00
CABLE 12' PROD 5 BM 4400/4600	1-115-0171-315	$254.00
CABLE 24' PROD 5 BM 4400/4600	1-115-0171-316	$308.00
CABLE 3' CONSOLE SCS 4600	1-115-0171-317	$440.00
CBL 20' CONSOLE SCS 4600	1-115-0171-318	$439.00
CABLE 12' EXTENSION 4400/4600	1-115-0171-319	$384.00
CABLE 24' EXTENSION 4400/4600	1-115-0171-320	$394.00
CABLE 15' INV 115 RT ANG BACKS	1-115-0171-325	$183.00
CABLE 6' CAN BUS WITH TEE	1-115-0171-326	$161.00
CABLE 3' CONSOLE SCS 4000	1-115-0171-334	$177.00
CABLE INT CAN BM/SD NODE-10 BM	1-115-0171-337	$97.00
CABLE ADAPT VIPR TO 4000 CABLE	1-115-0171-338	$224.00
CABLE CAN BM SENSE/SPD NODE	1-115-0171-345	$106.00
ADAPTER POWER RGL600IC-ENVIZIO	1-115-0171-349	$84.00
CABLE 40' EXTENSION CROPSTART	1-115-0171-360	$320.00
CABL 15' INTRFC INVICTA 115PHX	1-115-0171-361	$221.00
CABLE 12' CAN BUS WITH TEE	1-115-0171-362	$169.00
CABLE 24' CAN BUS WITH TEE	1-115-0171-363	$183.00
CABLE ADAPT TEE CAN BUS 6"	1-115-0171-364	$66.00
CABLE 21' PROD GRAN SCS 4600	1-115-0171-365	$330.00
CABLE ADAPT TEE W/PWR CAN BUS	1-115-0171-368	$100.00
CABLE ADAPTER TEE PANEL MOUNT	1-115-0171-379	$132.00
CABLE CAN SGL PROD CTR LIQUID	1-115-0171-380	$335.00
CABLE CAN SINGLE CONTROL GRAN	1-115-0171-381	$438.00
CABLE CAN DUAL CTRL GRAN PROD1	1-115-0171-382	$358.00
CABLE CAN SING CTRL LIQ 2 PRES	1-115-0171-384	$365.00

CBL 6' EXTENSION CAN BUS	1-115-0171-385	$75.00
CABLE 12' EXTENSION CAN BUS	1-115-0171-386	$79.00
CABLE 24' EXTENSION CAN BUS	1-115-0171-387	$80.00
CABLE 36' LTBAR TO INV 210/310	1-115-0171-394	$183.00
CABLE NULL MODEM 10'	1-115-0171-395	$24.00
CABLE ADAPT LIGHTBAR-STARFIRE	1-115-0171-396	$106.00
CABLE CAN DUAL CTRL SPIN PROD2	1-115-0171-400	$121.00
CABLE 36' LIGHTBAR TO 110/115	1-115-0171-401	$226.00
CABLE SPD SENSOR HAGIE 284 TXP	1-115-0171-402	$96.00
CABLE INTER CAN BM SEN/SP NODE	1-115-0171-405	$194.00
CABLE 2' POWER BULKHD END	1-115-0171-412	$85.00
CABLE 5' POWER PLUG END	1-115-0171-413	$117.00
CABLE ADAPTER 4X00 TO 4X0/6X0	1-115-0171-414	$287.00
CABLE 6' BOOM/POWER SCS 4600	1-115-0171-417	$99.00
CABLE 5' EXT SCS 4400/4600	1-115-0171-418	$373.00
CABLE 6' BM SENSE 4000/VIPER	1-115-0171-419	$75.00
CABLE 45' INV 115 STRT BACKSHL	1-115-0171-422	$169.00
CABLE 10' EXT WHEEL ANG SENSOR	1-115-0171-448	$95.00
CABLE 20' HYD/OVERRIDE SMARTRX	1-115-0171-454	$261.00
CABLE 20' JD 7000/8000 SMARTRA	1-115-0171-455	$322.00
CABLE 12' SMARTRAX TO RECEIVER	1-115-0171-460	$106.00
CABLE 12' POWER SMARTRAX	1-115-0171-465	$88.00
CABLE 20' OC SYSTEMS SMARTRAX	1-115-0171-466	$298.00
CABLE 75' TNC(M)-BNC(M) RG316	1-115-0171-470	$165.00
CABLE 50' TNC(M)-BNC(M) RG316	1-115-0171-471	$129.00
CABLE 2' VIPER/CAN - 460/660	1-115-0171-479	$940.00
CABLE 6'ANT TNC(M)-BULKHD AGCO	1-115-0171-481	$73.00
CABLE DIAGNOSTIC SMARTRAX	1-115-0171-484	$183.00
CABLE 2' VIPER/CAN NODES - 661	1-115-0171-491	$935.00
CABLE 20' EXTENSION S.P.S.	1-115-0171-501	$97.00
CABLE 6' EXTENSION SMARTRAX	1-115-0171-505	$138.00
CABLE 20' HYD/OVERRIDE SMARTRX	1-115-0171-506	$261.00
CABLE BOOM SIDEKICK TO JD 4920	1-115-0171-522	$146.00
CABLE BOOM SENSE SIDEKICK-JD 4	1-115-0171-523	$905.00
CABLE 16' EXT AUTOBOOM	1-115-0171-526	$490.00
CABLE 70' EXT ULTRASONIC SENSO	1-115-0171-527	$149.00
CABLE 6' POWER AUTOBOOM	1-115-0171-533	$46.00
CABLE 20' HYD/OVERRIDE TRACK	1-115-0171-541	$371.00
CABLE 36.5' EXT FLOWMETER	1-115-0171-544	$95.00
CABLE 2 PIN DEUTSCH BOOM SENSE	1-115-0171-546	$68.00
CABLE 2PIN PIN A SIG BM SENSE	1-115-0171-558	$46.00
CABLE ADAPTER NITRO AUTOBOOM	1-115-0171-559	$35.00
CABLE ADAPT 4000-VIPER CABLING	1-115-0171-562	$106.00
CABLE RGL 600I TO RECEIVER	1-115-0171-572	$107.00
CBL 35' POWER CAN MOTOR CONT	1-115-0171-582	$256.00
CABLE LIGHTBAR UPDATE RGL600IC	1-115-0171-583	$132.00
CABLE 37' G2 AUTOBM SELF PROP	1-115-0171-594	$565.00
CABLE 7' G2 AUTOBM REMOVABL BM	1-115-0171-597	$840.00
CBL 40' EXT ULTRASONIC SENS0R	1-115-0171-602	$96.00
CABLE ADAPT VIPER TO 4600/4400	1-115-0171-611	$820.00
CABLE 42.5' EXT UL SENSOR G2	1-115-0171-615	$93.00
CABLE 30' EXT ULSONIC SNSR G2	1-115-0171-616	$79.00
CABLE 17.5' EXT ULTRASONIC SNS	1-115-0171-618	$75.00
CABLE ADAPT BM SENSE LT UP/DN	1-115-0171-622	$72.00
CABLE ADAPT BM SENSE RT DOWN	1-115-0171-623	$72.00
CABLE ADAPT BM SENSE RIGHT UP	1-115-0171-624	$46.00

CABLE ADAPT BM SENSE DN JD4700	1-115-0171-632	$72.00
CABLE ADAPT BM SENSE UP JD4700	1-115-0171-633	$72.00
CABLE 34' EXT ULTRASONIC SENSR	1-115-0171-636	$117.00
CABLE RS232 PORT EXPANDER 100G	1-115-0171-648	$169.00
CABLE 46' EXT ULTRASONIC SNSR	1-115-0171-654	$107.00
CABLE 2' VIPER/CAN TO 440/450	1-115-0171-669	$990.00
CABLE SPD ADAPT JD 30 SERIES	1-115-0171-670	$99.00
CABLE ADAPT BM SNS B-FPOLAR JD	1-115-0171-674	$71.00
CABLE ADAPT BM SENSE NITRO 07+	1-115-0171-685	$44.00
CABLE Y-ADAPT GPS SNGL TO DUAL	1-115-0171-689	$161.00
CABLE 18' CAN BUS WITH "T"	1-115-0171-690	$177.00
CABLE PROGRAMMING TEE SMARTRAX	1-115-0171-692	$138.00
CABLE CAN SGL PRODUCT SPINNER	1-115-0171-700	$420.00
CABLE ADAPT VPRO-VIPER CABLING	1-115-0171-742	$184.00
CBL AUX VPRO	1-115-0171-745	$130.00
CABLE MAIN VPRO/EPRO	1-115-0171-746	$249.00
CABLE ADAPT SIDEKICK TO JD4830	1-115-0171-757	$353.00
CABLE 2' CONS VIPERPRO-460/660	1-115-0171-763	$980.00
CBL 2' VPRO CAN TO 661	1-115-0171-764	$980.00
CBL CONS VPRO CASE 4260	1-115-0171-765	$945.00
CBL 2' VPRO CAN-440/450	1-115-0171-767	$980.00
CABLE 20' HYD OVERRIDE SYS VLV	1-115-0171-775	$310.00
CABLE 20' SOLENOID OVERRIDE PC	1-115-0171-777	$310.00
CABLE 20' TNC(M)-BNC(M) RG58	1-115-0171-787	$88.00
CABLE ADAPT BM SENSE A-F JD	1-115-0171-789	$60.00
CABLE ADPTR SNGL AUTOBM BM SNS	1-115-0171-790	$35.00
CABLE 12' SCS 4400 NH3 SGL SEC	1-115-0171-809	$322.00
CABLE 10' EXT 2 PIN DEUTSCH	1-115-0171-810	$45.00
CABLE ADAPT ON/OFF NH3 3PIN WP	1-115-0171-815	$68.00
CABLE 15' INTRFC PHX 10 SPEED	1-115-0171-817	$132.00
CABLE 21' INTERFACE PHX 50	1-115-0171-818	$194.00
CABLE 15' PHOENIX 50 W/PORT B	1-115-0171-819	$255.00
CBL EPRO/VPRO-SWPRO 440 SW PWR	1-115-0171-820	$795.00
CBL EPRO/VPRO-SWPRO 4400 SWPWR	1-115-0171-821	$750.00
CABLE VPRO/EPRO-4000/5000 CABL	1-115-0171-823	$272.00
CABLE EXT 6' NH3 ON/OFF VALVE	1-115-0171-832	$65.00
CABLE EXT 12' NH3 ON/OFF VALVE	1-115-0171-833	$77.00
CABLE EXT 24' NH3 ON/OFF VALVE	1-115-0171-834	$92.00
CABLE EXP CRZR W/SPEED SMRT	1-115-0171-835	$129.00
CABLE 12' SCS440 3 SECT MASTER	1-115-0171-836	$428.00
CABLE 12' SCS4400 3 SEC MASTER	1-115-0171-837	$464.00
CABLE 12' NH3 SCS 440 6 SECT	1-115-0171-838	$685.00
CABLE 12' NH3 SCS 4400 6 SECT	1-115-0171-839	$710.00
CABLE 12' EXT SCS440 6 SECTION	1-115-0171-840	$172.00
CABLE 24' EXT SCS440 6 SECTION	1-115-0171-841	$264.00
CABLE 12' EXT SCS 4400 6 SECT	1-115-0171-842	$195.00
CABLE 24' EXT SCS 4400 6 SECT	1-115-0171-843	$289.00
CABLE PWR NH3 SECTIONS 4-6	1-115-0171-844	$100.00
CBL OLD NH3 ON/OFF VLV-4P CXA	1-115-0171-856	$74.00
CBL OLD NH3 CTRL VLV-4P CXA	1-115-0171-857	$80.00
CBL PORT EX CRZR W/SPD SMRTBM	1-115-0171-862	$198.00
CABLE ADAPT 37 TO 22 PIN ISO	1-115-0171-864	$219.00
CABLE FOOT SW ISO PROD CTRL	1-115-0171-865	$142.00
Cable, Expander Port B/D and CAN, Cruizer II	1-115-0171-870	$198.00
Cable, Expander Port A/C, Cruizer II, WR	1-115-0171-871	$248.00
CABLE POWER WR CRZR	1-115-0171-872	$107.00

CBL PWR 3' CRZR/II-H CONS SIDE	1-115-0171-876	$83.00
CABLE ADPTR CAN CRZR II	1-115-0171-886	$66.00
CBL PORT A/C W/SPEED CRZR-H	1-115-0171-889	$203.00
CABLE 12' MODEM TO RCVR	1-115-0171-890	$79.00
CBL 10' EXT RS232 STR THRU	1-115-0171-891	$94.00
CBL 150' TNC(M)-TNC(M) LMR 400	1-115-0171-896	$625.00
CABLE NODE HP ACCUFLOW	1-115-0171-909	$248.00
CBL TEE TRMBL EZ500 TO SLNGSHT	1-115-0171-910	$135.00
CBL ADPT PARADYNE TO SLINGSHOT	1-115-0171-911	$237.00
CBL PWR/CAN FRONT MNT BATTERY	1-115-0171-915	$490.00
CABLE IMPLEMENT EXT TEE 12' LG	1-115-0171-916	$310.00
CABLE IMPLEMENT EXT TEE 24' LG	1-115-0171-917	$361.00
CBL CAB PWR/CAN SCS4X/5X00 SRS	1-115-0171-927	$258.00
CBL IMP TEE 12" LG	1-115-0171-928	$232.00
CBL 10' EXT CAB CBL-CHASS CBL	1-115-0171-929	$145.00
CBL ISO IMP EXT TEE 12' LG	1-115-0171-931	$403.00
CBL ISO IMP EXT TEE 24' LG	1-115-0171-932	$478.00
CBL ISO IMP EXT TEE 36' LG	1-115-0171-933	$555.00
CBL IMP EXT TEE 36' LG	1-115-0171-934	$439.00
CBL ADPT TRMBL262-SLNGSHT PRTC	1-115-0171-935	$243.00
CBL PWR/CAN CHAS CASE STX/GEN	1-115-0171-936	$439.00
CBL PWR/CAN CHAS CASE MAGNUM	1-115-0171-937	$510.00
CBL PWR/CAN CHAS JD/BUHLER TRC	1-115-0171-938	$439.00
CBL TEE 4400-HP ACCUFLW 18'LG	1-115-0171-940	$374.00
CBL 4400/4600 INT PROD CNTRL	1-115-0171-945	$488.00
CBL CAN ACCFLW HP 3 SECT/MSTR	1-115-0171-946	$665.00
CBL CAN ACCFLW HP 6 SECT/MSTR	1-115-0171-947	$850.00
CBL INT 440/450 16P PROD CNTRL	1-115-0171-949	$394.00
CBL IMP EXT TEE 6' LG	1-115-0171-951	$284.00
CBL PWR 35' 3RD-4TH INJ PUMP	1-115-0171-953	$431.00
CBL NODE 6' 3RD-4TH INJ PUMP	1-115-0171-954	$358.00
CBL NODE 12' 3RD-4TH INJ PUMP	1-115-0171-955	$385.00
CBL NODE 24' 3RD-4TH INJ PUMP	1-115-0171-956	$421.00
CBL NODE 36' 3RD-4TH INJ PUMP	1-115-0171-957	$450.00
CBL ADPT JD ISO TO RAVEN ISO	1-115-0171-958	$444.00
CBL CONS SCS 5000 CHAS CBL INT	1-115-0171-959	$326.00
CBL ISO IMP EXT TEE 12" LG	1-115-0171-960	$316.00
CBL ISO IMP EXT TEE 6' LG	1-115-0171-961	$349.00
CBL ADPT RVN ISO TO ACTVE TERM	1-115-0171-963	$78.00
Cable, ISOBUS hitch to Raven ISO ECU, 14'	1-115-0171-988	$394.00
CBL ISO HITCH TO RVN ECU 22'	1-115-0171-989	$472.00
Cable, ISOBUS hitch to Raven ISO ECU, 45'	1-115-0171-990	$625.00
CBL JD ISO RATE CTRL TO RVN IS	1-115-0171-991	$164.00
CBL SGL PR GRAN GEN II CBLING	1-115-0171-994	$468.00
CBL CONS 4070 GEN II CABLING	1-115-0171-995	$325.00
CBL ADPT TOPCON TO SLINGSHOT	1-115-0171-997	$103.00
CBL ADPT P300/SLNGSHT/PC	1-115-0171-998	$319.00
CBL FIELD HUB MODEM POWER	1-115-0171-999	$96.00
CBL CAB VPRO/EPRO GEN II RTK	1-115-0172-001	$444.00
CBL 3 METER SERIAL EXTENSION	1-115-0172-002	$18.00
CBL CONS 4400 LIQ ONLY GEN II	1-115-0172-003	$1,240.00
CBL AUXILIARY 2 PRODUCT	1-115-0172-005	$590.00
CBL 4400 LIQ 16P AMP GEN II	1-115-0172-007	$1,095.00
CBL 21' PRD GRAN 37 PIN	1-115-0172-014	$221.00
CBL ADPT VIPER 4 TO VPRO CBLIN	1-115-0172-023	$171.00
CBL CONS VIPER 4 GEN II	1-115-0172-025	$500.00

CBL 17' ISO HITCH TO RAVEN ECU	1-115-0172-034	$412.00
CBL 17' ISO IMPLEMENT EXT TEE	1-115-0172-035	$429.00
CBL PROD CNTRL 4-10 PROD	1-115-0172-039	$1,625.00
CBL ADPT GEN II CBL TO GEN I	1-115-0172-041	$193.00
CBL SGL PRD NDE TO 37P PRD CBL	1-115-0172-053	$485.00
CBL SCS AND GPS OUT CRUIZER	1-115-0172-054	$138.00
CBL ADPT FAST VLV TO PWM VLV	1-115-0172-055	$84.00
CBL PRD CTRL AGCO MICROBIN 5/6	1-115-0172-070	$266.00
CBL PRD CTRL AIRSPRD RETRO	1-115-0172-071	$1,490.00
CBL PRD CTRL SCS 460/660 RETRO	1-115-0172-076	$590.00
CBL PRD CTRLR ISO 37P JD	1-115-0172-079	$735.00
CBL 6' ADP JD ISO-RVN ISO INJ	1-115-0172-081	$437.00
CBL 12' ADP JD ISO-RVN ISO INJ	1-115-0172-082	$490.00
CBL 24' ADP JD ISO-RVN ISO INJ	1-115-0172-083	$580.00
CBL 36' ADP JD ISO-RVN ISO INJ	1-115-0172-084	$620.00
CBL ETHERNET 2M M12-RJ45(M)	1-115-0172-090	$57.00
CBL 6' EXT JD ISO TO RVN ISO	1-115-0172-093	$187.00
CBL 12' EXT JD ISO TO RVN ISO	1-115-0172-094	$214.00
CBL 24' EXT JD ISO TO RVN ISO	1-115-0172-095	$256.00
CBL PRD CTRLR 4600 RETROFIT	1-115-0172-097	$510.00
CBL ADPT OUTBACK A320-SLNGSHT	1-115-0172-102	$59.00
CBL SDKCK PRO GEN I W/AGITATOR	1-115-0172-104	$426.00
CBL SDKCK PRO GEN II W/AGI	1-115-0172-106	$426.00
CBL SDKCK PRO GEN II	1-115-0172-107	$347.00
CBL ADPTR 952 TO 492 FLOW MON	1-115-0172-110	$54.00
CBL ADPTR 107 TO 979 FLOW MON	1-115-0172-111	$49.00
CBL ADPT RVN CBL-3P DTSCH FLWM	1-115-0172-191	$387.00
CBL SDKCK PRO GEN2 W/AGT & PMP	1-115-0172-191	$387.00
CBL MTR CRTL W/AGT & PMP FLSH	1-115-0172-192	$490.00
CABLE PWR/CAN 16' PGLD+/UGLD	1-115-0230-007	$390.00
CABLE BM SNS AUTOBM METRIPACK	1-115-0230-013	$84.00
CABLE BM SNS METRIPACK PINASIG	1-115-0230-035	$54.00
CABLE BM SNS WTHRPK PIN A SIG	1-115-0230-037	$102.00
CBL BM SNS 2 PIN DEUTSCH	1-115-0230-039	$49.00
CABLE BM SNS B-F POLAR JD 49X0	1-115-0230-040	$99.00
CABLE BM SNS A-F POLAR JD 49X0	1-115-0230-041	$99.00
CABLE VLV 39' CAN PG+/UG CRC	1-115-0230-045	$975.00
CABLE BM SNS CNTR UP JD4710	1-115-0230-048	$62.00
CABLE BM SNS CNTR DWN JD4710	1-115-0230-049	$62.00
CABLE 50' EXT ULSNC SNSR ATBM	1-115-0230-050	$133.00
CABLE 60' EXT ULTSNC SNSR ATBM	1-115-0230-051	$151.00
CABLE ADAPT RNG TERM CRC BMSNS	1-115-0230-065	$53.00
CABLE ADPT ATBM CRC EXT 14'	1-115-0230-066	$98.00
CABLE ATBM PWR CAN NODE UPDATE	1-115-0230-071	$56.00
CBL BM SNS AUTOBM 280 SRS	1-115-0230-072	$99.00
CBL BM SNS CRC AUTOBM 280 SER	1-115-0230-074	$99.00
CBL ADPT CEN RACK 3 PIN DIN	1-115-0230-077	$99.00
CBL ADAPT BM SNS PIN 2 SIGNAL	1-115-0230-080	$72.00
CBL ATBM DIR VLV ADAPT CRC	1-115-0230-081	$72.00
CBL BM SNS CRC ATBM CASE PIN A	1-115-0230-087	$72.00
CBL CNSL 440/450/460/660 SMRTB	1-115-1001-001	$464.00
CABLE SMARTBM SCS4400/4600	1-115-1001-025	$464.00
CABLE SMARTBOOM JOHN DEERE	1-115-1001-026	$464.00
CABLE SMRTBM 3000/4000 SCS 460	1-115-1001-027	$464.00
CABLE SMRTBM 844-E/854 TEEJET	1-115-1001-028	$535.00
CABLE SMARTBM ROG 01/06+	1-115-1001-029	$464.00

CABLE SMRTBM ROG 12/05 -	1-115-1001-030	$464.00
CABLE SMRTBM 1286C ROGATOR	1-115-1001-031	$464.00
CABLE SMRTBM 1254 ROGATOR	1-115-1001-032	$464.00
CABLE SMRTBM CASEIH PATRIOT	1-115-1001-034	$464.00
CABLE SMRTBM UNIV 10BM	1-115-1001-039	$454.00
CBL OMNIRW PLNTR MON/RW SHTOFF	1-115-3001-045	$1,095.00
CBL ADPT PLNTR SCTN/PROD CNTRL	1-115-3001-046	$251.00
CBL SEED TUBE EXT 5' LG	1-115-3001-051	$164.00
CBL SEED TUBE EXT 20'LG	1-115-3001-052	$219.00
CBL PLNTR SECT DJ MOTOR/ENCDR	1-115-3001-053	$164.00
CBL ADPT CLTCH CONN-JD ROW CLT	1-115-3001-054	$273.00
CBL ADPT 16 CLTCH UNIV AIR/ELE	1-115-3001-063	$327.00
CBL ADPT OEM CLUTCH 1-4 SECTN	1-115-3001-064	$327.00
CBL OMNIRW SECTION CTRL LVL 2	1-115-3001-065	$1,095.00
CBL ADPT 6PIN-KINZE OEM HYD MT	1-115-3001-067	$164.00
CBL ADPT LIQUID SHUTOFF LVL 2	1-115-3001-068	$436.00
CBL SEED MONITOR KINZE 12R30	1-115-3001-069	$555.00
CBL SEED MONITOR KINZE 16R30	1-115-3001-070	$715.00
CBL CAN ACCUROW	1-115-3001-071	$565.00
CBL CAN MULTI-PROD LIQ/GRAN	1-115-3001-082	$685.00
CBL 12' NH3 8 SECT W/MSTR VLV	1-115-3001-083	$605.00
CBL ADPT 6P TO CASE HYD MTR	1-115-3001-084	$164.00
CBL 12' EXT CAN/PWR GEN II	1-115-3001-085	$395.00
CBL 20' EXT CAN/PWR GEN II	1-115-3001-086	$453.00
CBL 24' EXT CAN/PWR GEN II	1-115-3001-087	$361.00
CBL 28' EXT CAN/PWR GEN II	1-115-3001-088	$535.00
CBL 32' EXT CAN/PWR GEN II	1-115-3001-089	$560.00
CBL 36' EXT CAN/PWR GEN II	1-115-3001-090	$585.00
CBL 40' EXT ACCUROW PWR/CAN	1-115-3001-091	$595.00
CBL 40' EXT CAN/PWR GEN II	1-115-3001-091	$595.00
CBL ADPT CLTCH TO JD RW CMD 24	1-115-3001-092	$273.00
CBL AGTRON EXT 10'	1-115-3001-095	$76.00
CBL AGTRON EXT 20'	1-115-3001-096	$91.00
CBL AGTRON Y CBL	1-115-3001-097	$96.00
CBL AGTRON SNSR LOOP 2'	1-115-3001-098	$17.00
CBL AGTRON SNSR LOOP 2'	1-115-3001-098	$17.00
CBL AGTRON SNSR LOOP 4'	1-115-3001-099	$21.00
CBL AGTRON SNSR LOOP 4'	1-115-3001-099	$21.00
CBL AGTRON SNSR LOOP 10'	1-115-3001-100	$27.00
CBL AGTRON SNSR LOOP 10'	1-115-3001-100	$27.00
CBL AGTRON SNSR LOOP 20'	1-115-3001-101	$39.00
CBL AGTRON SNSR LOOP 20'	1-115-3001-101	$39.00
CBL AGTRON NODE	1-115-3001-102	$530.00
CBL ADPT STD VLV TO PLNTR PWM	1-115-3001-104	$32.00
CBL CART OMNISEED 5 BIN	1-115-3001-105	$1,705.00
CBL PRESSURE OMNISEED	1-115-3001-107	$192.00
CBL PLNTR/SEEDR AUX MON NODE	1-115-3001-108	$399.00
CBL PLNTR/SEEDR AUX CTRL NODE	1-115-3001-109	$725.00
CBL ADPT PLTR/SDR 16P AUX PASS	1-115-3001-110	$357.00
CBL PLNTR/SEEDR AUX CRTL VLVS	1-115-3001-111	$192.00
CBL PLNTR/SEEDR AUX SENSORS	1-115-3001-112	$192.00
CBL ADPT 6P TO WHT OEM HYD MTR	1-115-3001-117	$164.00
CBL ADPT BIN/AIR PRESS/VAC	1-115-3001-123	$64.00
CBL 4 SECT 12' PRD PLNTR 16P	1-115-3001-125	$275.00
CBL 4 SECT 12' PRD PLNTR 37P	1-115-3001-126	$214.00
CBL ADPT 37P PROD AUX PASS THR	1-115-3001-127	$510.00

CBL ELEC PMP 37P 12’4 SECT	1-115-3001-128	$384.00
CBL PLNTR/SDR AUX VLV FULL POP	1-115-3001-131	$352.00
CBL PNTR/SDR AUX SNS FULL POP	1-115-3001-132	$540.00
CBL SEED SNSR MNTRNG 8ROW 40"S	1-115-3001-138	$399.00
CBL SMTRAX TERR COMP 0C/LS	1-115-4001-002	$390.00
CABLE STRAX TERR COMP PRS COMP	1-115-4001-003	$403.00
CBL NODE TERR COMP HYDRAULIC	1-115-4001-011	$390.00
CABLE TERR COMP W/CRZR HYD	1-115-4001-013	$403.00
CBL ADPT TC-STND ALONE W/STR	1-115-4001-034	$500.00
CBL CRZR II TO 3D NODE	1-115-4001-066	$181.00
CBL 6" TEE STRAX TO CAB CABLE	1-115-4001-070	$159.00
Cable, 72" Tee, SmarTrax to Cab	1-115-4001-071	$238.00
CBL 72" TEE STRAX TO CAB CABLE	1-115-4001-071	$238.00
CBL CHASSIS STEER ONLY SYSTEMS	1-115-4001-085	$232.00
CBL CONS CRZR II CASE STR RDY	1-115-4001-088	$240.00
CBL CONS CRZR WR GEN II CBL	1-115-4001-090	$373.00
CBL ADPT EXT GPS CRZR II	1-115-4001-095	$109.00
CBL CONS CRZR II RTK CASE STR	1-115-4001-099	$530.00
CBL CNSL CRZR II RTK STR RDY	1-115-4001-102	$510.00
CBL CNS CRZR WR RTK GEN II CBL	1-115-4001-123	$530.00
CBL STRX NODE TO STRX MD	1-115-4001-157	$258.00
CBL STR ONLY GEN I CBL 3.5’ LG	1-115-4001-207	$140.00
KIT CAN SMRTSTR 3D VPRO/EPRO	1-115-4001-207	$140.00
CBL RAVEN ISO/PWR W/IBBC CONN	1-115-7300-021	$665.00
WELDMENT INLET MANIFOLD	1-116-0159-742	$530.00
WELDMENT GUAGE MANIFOLD	1-116-0159-743	$259.00
KIT NITRO N1/N2/N3 G1-UG UPGRD	1-117-0131-012	$3,480.00
KIT ROG/APACHE/SPRACOUPE G1-UG	1-117-0131-013	$3,480.00
KIT JD 47X0 CC G1-UG UPGRD	1-117-0131-014	$3,480.00
KIT JD 4920/4930 G1-UG UPGRD	1-117-0131-016	$3,480.00
KIT CASE 4260-4410 G1-UG UPGRD	1-117-0131-017	$3,480.00
KIT G1-UG FC 68/CIH SRX 80-100	1-117-0131-024	$3,480.00
KIT G1-UG FC68/CIH SRX 120-134	1-117-0131-025	$3,665.00
KIT OC CONVER COMMAND BLOCK	1-117-0131-027	$810.00
KIT AXLE OFFSET FLEXICOIL W/SC	1-117-0131-038	$462.00
KIT AXLE OFFSET CIH3150/3185/	1-117-0131-039	$700.00
KIT AXLE 24" STRAIGHT	1-117-0131-040	$332.00
KIT AXLE 34" STRAIGHT	1-117-0131-041	$336.00
KIT AXLE CUSHIONED	1-117-0131-042	$925.00
KIT SNSR HSG ULTSN MOLDED	1-117-0131-043	$79.00
KIT INST NITRO SRS PG+/UG UPG	1-117-0131-050	$3,605.00
KIT INST ROG 04+ PG+ TO UG COM	1-117-0131-051	$3,605.00
KIT INST JD PG+ TO UG CMND VLV	1-117-0131-052	$3,605.00
KIT INST CIH 3150/85/3200/B	1-117-0131-053	$3,605.00
KIT INST JD4920/30 PG+-UG CMND	1-117-0131-054	$3,605.00
KIT INST G2 CIH PG+-UG CMNDVLV	1-117-0131-055	$3,605.00
KIT INST REDBALL HARDI PG+-UG	1-117-0131-057	$3,605.00
KIT INST GRT PLN WYLIE BESTWAY	1-117-0131-059	$3,605.00
KIT INST SPRAYAIR 2010 G1-G2	1-117-0131-061	$3,605.00
KIT RPLCMT AUTOBM GA WHL BSHG	1-117-0131-062	$67.00
KIT INST SRAYAIR BM PG+ TO UG	1-117-0131-063	$3,605.00
KIT INST TOP AIR PG+UG CMNDVLV	1-117-0131-064	$3,605.00
KIT INST UPGRADE TOP AIR	1-117-0131-065	$3,480.00
KIT AXLE CUSHIONED OFFSET	1-117-0131-068	$1,035.00
KIT UPGRD CRC ROG FACT INSTALL	1-117-0131-069	$1,335.00
KIT UPGRD CRC GEN PRIOR REV B	1-117-0131-071	$2,220.00

KIT UPGRD CRC GENERIC REV B +	1-117-0131-072	$1,335.00
KIT INST NITRO N4 PG+ TO UG	1-117-0131-074	$3,605.00
KIT INST ROG 2003- PG+ TO UG	1-117-0131-075	$3,605.00
KIT INST SCHABEN PG+ TO UG	1-117-0131-078	$3,605.00
KIT INST FLEXI-FOIL/SRX PG+-UG	1-117-0131-079	$3,605.00
KIT SNSR BRKT ULTSN POMMIER	1-117-0131-080	$166.00
KIT ATBM UL SNSR BRKT EXT 12"S	1-117-0131-082	$296.00
KIT RPLCMT AUTOBM GA WHL NEEDL	1-117-0131-085	$97.00
KIT WHEEL G1 AUTOBOOM NITRO	1-117-0133-004	$1,155.00
KIT WHEEL AUTOBM CASE4260/4410	1-117-0133-006	$1,155.00
KIT WHEEL G1 AUTOBM JD 4920	1-117-0133-011	$1,155.00
KIT WHEL G1 AUTOBM JD4700/4710	1-117-0133-012	$1,155.00
KIT WHEEL G1 AUTOBOOM APACHE	1-117-0133-013	$1,155.00
KIT WHL ATBM WILLMAR 8500 EGLE	1-117-0133-014	$1,155.00
KIT WHEL G1 AUTOBM JD4720 CCLS	1-117-0133-020	$1,155.00
KIT WHEEL G1 AUTOBOOM FAST	1-117-0133-023	$1,155.00
KIT WHEEL G1 AUTOBM FLEXI-COIL	1-117-0133-024	$1,155.00
KIT WHL G1 AUTOBM HARDI EAGLE	1-117-0133-026	$1,155.00
KIT WHL G1 AUTOBM HARDI FORCE	1-117-0133-028	$1,155.00
KIT WHL G1 AUTOBM BRANDT CC	1-117-0133-029	$1,155.00
KIT WHEEL AUTOBOOM GREGSON	1-117-0133-031	$1,165.00
KIT WHL G1 AUTOBM SUMMERS-2004	1-117-0133-033	$1,165.00
KIT WHL ATBM SCHABEN 8500/8650	1-117-0133-034	$1,155.00
KIT WHL G1 AUTOBM REDBALL CC	1-117-0133-035	$1,155.00
KIT WHL G1 AUTOBM BESTWAY CC	1-117-0133-036	$1,155.00
KIT WHL ROG854/1054/1254/664	1-117-0133-037	$1,155.00
KIT WHL G1 AUTOBM FLEXICOIL ST	1-117-0133-041	$1,155.00
KIT WHEEL G1 SPRA COUPE 7X50	1-117-0133-049	$1,155.00
KIT WHEEL G1 TOP AIR 80/90 BM	1-117-0133-055	$1,155.00
KIT WHL G1 FC68/CIHSRX 120-134	1-117-0133-071	$1,155.00
KIT WHL AUTBM CASEIH 120'BM	1-117-0133-075	$1,155.00
KIT WHEEL AUTBM CONDR SRS MILR	1-117-0133-081	$1,155.00
KIT WHEEL AUTOBOOM GVM 120'	1-117-0133-083	$1,155.00
KIT WHEEL ATBM RG 120' 2010+	1-117-0133-085	$1,155.00
KIT WHL ATBM VRSTL SX275	1-117-0133-097	$1,155.00
KIT WHL ATBM JD 4630	1-117-0133-100	$1,065.00
KIT WHEEL ATBM 90-100' BOOM	1-117-0133-101	$1,155.00
KIT WHL ATBM SCHABEN 8650 120'	1-117-0133-104	$1,155.00
KIT LITTLE WHL JD 49X0	1-117-0135-001	$382.00
KIT LITTLE WHEEL ROGATOR	1-117-0135-002	$456.00
KIT LITTLE WHEEL CASE	1-117-0135-003	$456.00
KIT LITTLE WHEEL JD 47X0/48X0	1-117-0135-004	$409.00
KIT LITTLE WHEEL APACHE	1-117-0135-005	$456.00
KIT LITTLE WHEEL MILLER	1-117-0135-007	$456.00
KIT LITTLE WHEEL HARDI	1-117-0135-008	$382.00
KIT LITTLE WHL SPRA COUPE 7000	1-117-0135-010	$456.00
KIT LITTLE WHEEL TOP AIR	1-117-0135-011	$456.00
KIT AUTOBOOM POWERGLIDE	1-117-0137-022	$1,700.00
KIT AUTOBOOM POWERGLIDE+ CAN	1-117-0137-023	$2,205.00
KIT ATBM UG CAN 100' BM & LRGR	1-117-0137-024	$3,745.00
KIT AUTOBOOM CONSOLE CAN	1-117-0137-025	$1,025.00
KIT CAN DUAL ULTSN SNSR CIH	1-117-0137-026	$1,430.00
KIT CAN DUAL ULTSN SNSR JD	1-117-0137-027	$1,430.00
KIT CAN DUAL ULTSN SNSR SUMMER	1-117-0137-028	$1,430.00
KIT CAN DUAL ULTSN SNSR NITRO	1-117-0137-029	$1,430.00
KIT CAN DUAL ULTSN SNSR FAST	1-117-0137-030	$1,430.00

KIT CAN DUAL ULTSN SNSR ROG	1-117-0137-031	$1,430.00
KIT UPG ULTSN SNSR CTR SEC	1-117-0137-032	$830.00
KIT UPG OEM ULTSN SNSR CTR SEC	1-117-0137-033	$765.00
KIT UPGRADE CAN DUAL HAGIE STS	1-117-0137-035	$1,445.00
KIT ISO CAN ATBM PG+ PULLTYPE	1-117-0137-037	$2,920.00
KIT ISO CAN ATBM PG+ JD SP GS2	1-117-0137-038	$2,920.00
KIT ISOCAN ATBM PG+ AGCO W/GTA	1-117-0137-039	$3,045.00
KIT ISO CAN ATBM UG PULLTYPE	1-117-0137-041	$4,015.00
KIT ISO CAN ATBM UG JD SP GS2	1-117-0137-042	$4,525.00
KIT ISO CAN ATBM UG AGCO W/GTA	1-117-0137-043	$4,525.00
KIT UPGRD CAN DUAL ULSNSR MILR	1-117-0137-044	$1,430.00
KIT ATBM UG CAN 90' BM & SMLR	1-117-0137-047	$3,745.00
KIT ATBM UG CAN MNTD SPRAYER	1-117-0137-048	$3,745.00
KIT UPGRD ULSNC SNSR 4PIN CNTR	1-117-0137-049	$975.00
KIT ISO CAN ATBM PG+ JD4720	1-117-0137-050	$2,920.00
KIT ISO CAN ATBM UG JD 4720	1-117-0137-051	$4,525.00
KIT ISO CAN PG+ JD4700/10 GS2+	1-117-0137-052	$2,920.00
KIT ISO CAN UG JD4700/10 GS2+	1-117-0137-053	$4,525.00
KIT UPGRD CAN DUAL ULSNC SPRAY	1-117-0137-064	$1,400.00
KIT INST ROG 04+ PG+-UG HYDAC	1-117-0139-001	$3,605.00
KIT INST JD 47X0/4830 PG+-UG H	1-117-0139-002	$3,605.00
KIT INST CIH -04 PG+-UG HYDAC	1-117-0139-003	$3,605.00
KIT INST JD 4920/30 PG+-UG HYD	1-117-0139-004	$3,605.00
KIT INST 3320/30/4420 PG+-UG	1-117-0139-005	$3,605.00
KIT INST HARDI PG+-UG HYDAC	1-117-0139-006	$3,605.00
KIT INST REDBALL/SUMMR PG+-UG	1-117-0139-007	$3,605.00
KIT INST FAST PG+-UG HYDAC	1-117-0139-008	$3,605.00
KIT INST GP WYLIE BW PG+-UG	1-117-0139-009	$3,605.00
KIT INST WALKER PG+-UG HYDAC	1-117-0139-010	$3,605.00
KIT INST SPRAYAIR PG+-UG HYDAC	1-117-0139-011	$3,605.00
KIT INST TOP AIR PG+-UG HYDAC	1-117-0139-012	$3,605.00
KIT INST ROG -03 PG+-UG HYDAC	1-117-0139-013	$3,605.00
KIT INST SPRACOUPE PG+-UG HYDA	1-117-0139-014	$3,605.00
KIT INST APCH CIH PG+-UG HYDAC	1-117-0139-015	$3,605.00
KIT INST SCHABEN PG+-UG HYDAC	1-117-0139-016	$3,605.00
KIT INST FLEXI/SRX PG+-UG HYDA	1-117-0139-017	$3,605.00
KIT ISO JD 47X0/4830 PG+-UG HY	1-117-0139-019	$2,955.00
KIT ISO HARDI F/E PG+-UG HYDAC	1-117-0139-020	$2,955.00
KIT ISO REDBALL/SUMMERS PG+-UG	1-117-0139-021	$2,955.00
KIT ISO FAST PG+-UG HYDAC VLV	1-117-0139-022	$2,955.00
KIT ISO GRTPLNS/WYLIE/BW PG+UG	1-117-0139-023	$2,955.00
KIT ISO SPR AIR BM PG+-UG HYDC	1-117-0139-024	$2,955.00
KIT SENSOR SINGLE SHAFT GRAN	1-117-0159-484	$88.00
KIT 24 GALLON TANK	1-117-0159-540	$212.00
KIT 24 GALLON TANK/AGIT	1-117-0159-541	$244.00
KIT AGITATOR 16 GALLON	1-117-0159-543	$715.00
KIT AGITATOR 24 GALLON	1-117-0159-544	$770.00
KIT SADDLE ASY 24GAL TANK MTG	1-117-0159-554	$179.00
KIT SENSOR FAN	1-117-0159-575	$107.00
KIT BIN LEVEL SENSOR	1-117-0159-640	$230.00
KIT PLUMBING SIDEKICK INJECT	1-117-0159-760	$231.00
KIT CROP START 8 ROW	1-117-0159-826	$1,175.00
KIT, FLOW MONITOR 4ROW ADD-ON	1-117-0159-830	$79.00
KIT CROP START II 8 ROW	1-117-0159-831	$2,810.00
KIT MANIFOLD VALVE ADD-ON CROP	1-117-0159-832	$266.00
KIT RGL 600 TO INVICTA 210/310	1-117-0159-881	$1,195.00

KIT CAN PWR TEE/TERMINATORS	1-117-0159-923	$194.00
KIT SCS 4400 CONSOLE	1-117-0159-924	$1,690.00
KIT SCS 4600 CNSL	1-117-0159-926	$1,650.00
KIT RGL600 W/WRLS SWBX 210/310	1-117-0159-968	$1,195.00
KIT RGL600 W/WRLS SWBX UNIVRSL	1-117-0159-969	$1,195.00
KIT MOUNTING MOTOR CONTROL	1-117-0159-984	$46.00
KIT SEALS INJECTION PUMP	1-117-0159-987	$40.00
KIT RGL 600IC	1-117-0159-991	$875.00
KIT NODE MTNG BRACKET VPR/VPRO	1-117-0159-993	$123.00
KIT CAP/NUT HAWE 6 MM W/WASHER	1-117-0171-003	$22.00
KIT UPDATE RGL600IC LIGHTBAR	1-117-0171-011	$388.00
KIT MOTOR CONT CAN W/O AGIT 35	1-117-0171-030	$1,060.00
KIT TM-1 TILT SENSOR	1-117-0171-059	$560.00
KIT PHOENIX 200	1-117-0171-071	$1,685.00
KIT PHOENIX 300 W/ L1L2 ANT	1-117-0171-097	$4,160.00
KIT RTNR HEAT EXCH	1-117-0171-121	$74.00
KIT EPRO W/O GPS 2 USB	1-117-0171-128	$2,995.00
KIT LABEL DANGER/CAUTION NH3	1-117-0171-129	$29.00
KIT MNTG VESA PLATE	1-117-0171-132	$100.00
KIT WATCHDOG SPRYR STAT	1-117-0171-138	$1,955.00
KIT MBA-3 ANTENNA	1-117-0171-141	$580.00
KIT PHOENIX 50	1-117-0171-149	$790.00
KIT CNTRL VALVE W/ADAPTER NH3	1-117-0171-156	$565.00
KIT FAST VALVE W/ADAPTER NH3	1-117-0171-157	$685.00
KIT ON/OFF VALVE W/ADAPTER NH3	1-117-0171-158	$555.00
KIT PHOENIX 10	1-117-0171-165	$460.00
KIT SW PRO SCS440 STYLE CABLE	1-117-0171-167	$2,465.00
KIT SW PRO 4400 STYLE CABLING	1-117-0171-168	$2,390.00
KIT TM-1 TILT SNSR W/CRZR CBLE	1-117-0171-180	$605.00
KIT SWPRO TO VPRO MNT BRKT	1-117-0171-181	$82.00
KIT BRKT NODE MNTG EPRO	1-117-0171-182	$114.00
KIT CLOSED CENTER YAW UPDATE	1-117-0171-183	$2,115.00
KIT OPEN CENTER YAW UPDATE	1-117-0171-184	$2,445.00
KIT SWITCHPRO W/O CABLING	1-117-0171-190	$2,185.00
KIT INDICATOR NH3 VALVE	1-117-0171-219	$20.00
KIT 6-PACK REMOTE SECT CNTRL	1-117-0171-221	$4,965.00
KIT REMOTE SECT CNTRL SINGLE	1-117-0171-224	$995.00
KIT BIN LVL SNSR 102" CABLE	1-117-0171-242	$260.00
KIT WR CRZR HELIX ANT*	1-117-0171-245	$2,045.00
KIT CRZR II PATCH ANT*	1-117-0171-247	$1,695.00
KIT CRZR II HELIX ANT*	1-117-0171-249	$1,895.00
KIT WR CRZR PATCH ANT*	1-117-0171-250	$1,845.00
KIT SMRTBM CNTRLLR*	1-117-0171-256	$1,740.00
KIT NODE ACBM CNTRL W/REMOTE	1-117-0171-284	$1,520.00
KIT MAG MNT PROX SWITCH	1-117-0171-298	$133.00
KIT MAG MNT RVN CAN NODE UNIV	1-117-0171-299	$40.00
KIT TANK CALIBRATION	1-117-0171-302	$565.00
KIT HP ACCFLW PUMP W/FTGS	1-117-0171-331	$6,750.00
KIT ACCFLW UGRD 1"-1 1/4" DUAL	1-117-0171-332	$1,870.00
KIT ACCFLW UGRD 1"-1 1/4" FAST	1-117-0171-333	$1,600.00
KIT HP ACCFLW PUMP CNTRL	1-117-0171-334	$1,035.00
KIT FIELD HUB DESKTOP ACC	1-117-0171-350	$98.00
KIT SEAL NH3 PUMP	1-117-0171-353	$450.00
KIT SEAL NH3 HYD MOTOR	1-117-0171-354	$115.00
KIT INT FIELD HUB ANT	1-117-0171-356	$515.00
KIT INT FIELD HUB HSPA	1-117-0171-357	$1,895.00

KIT NH3 SINGLE COOLER DUAL VLV	1-117-0171-384	$3,560.00
KIT NH3 SINGLE COOLER FAST VLV	1-117-0171-386	$3,330.00
KIT NH3 SINGLE COOLER AND FTGS	1-117-0171-391	$1,845.00
KIT DRIVE BEARING INJ PUMP	1-117-0171-394	$50.00
KIT VAPOR TUBE 3/4"	1-117-0171-409	$113.00
KIT VAPOR TUBE 1/2"	1-117-0171-410	$156.00
KIT EPROII/SWPRO MBA-6 4400 CB	1-117-0171-411	$6,435.00
KIT EPROII/SWPRO MBA-6 440/450	1-117-0171-412	$6,435.00
KIT CBL CFX750 - SLNGSHT	1-117-0171-416	$132.00
KIT CRZR II RTK HELIX ANT*	1-117-0171-418	$4,995.00
BRKT MTG SLINGSHOT/P300	1-107-0171-989	$29.00
KIT CLAMPS SLINGSHOT/P300	1-117-0171-428	$54.00
KIT EPROII/SWPRO MBA6 4400 VRA	1-117-0171-446	$6,900.00
KIT WR CRZR RTK HELIX ANT*	1-117-0171-460	$5,470.00
KIT USB TO CAN CNVRTR RAVEN	1-117-0171-464	$565.00
KIT ORIFICE NH3	1-117-0171-501	$42.00
KIT FIELD HUB WIFI VZ CELL	1-117-0171-514	$2,050.00
KIT FLD HUB WIFI HSPA CELLULAR	1-117-0171-517	$2,050.00
KIT RINSE ASSIST SIDEKICK PRO	1-117-0171-554	$640.00
KIT HP+ FAST VALVE	1-117-0171-571	$10,295.00
KIT ACCFLW VORTEX FAST VALVE	1-117-0171-573	$5,895.00
KIT ACCFLW VORTEX DUAL VALVE	1-117-0171-574	$6,295.00
KIT HP+ PUMP UPGRADE	1-117-0171-575	$4,750.00
KIT HYD MTR SEAL HP+	1-117-0171-576	$103.00
KIT PMP SEAL HP+	1-117-0171-577	$296.00
KIT VORTEX DUAL INLET	1-117-0171-578	$1,910.00
KIT SLNGSHT GNSS REF STS RTK V	1-117-0171-584	$9,995.00
KIT SLNGSHT GNSS REF STA RTK H	1-117-0171-585	$9,995.00
KIT RPLCMNT PARTS RFM60, 60SG	1-117-0171-590	$189.00
KIT SEAL VORTEX COOLER	1-117-0171-591	$31.00
KIT SLNGSHT SBS2.0 RTK HSPA	1-117-0171-593	$7,800.00
KIT SLNGSHT SBS2.0 RTK VERIZON	1-117-0171-594	$7,800.00
KIT ACCFLW VRTX SNGL INLT FVAL	1-117-0171-612	$5,095.00
KIT ACCFLW VRTX SNGL INLT DUAL	1-117-0171-613	$5,495.00
KIT SMRTRX 3D NODE VPRO/EPRO	1-117-0197-009	$4,785.00
KIT SMRTRX 3D NODE CRZR	1-117-0197-034	$4,785.00
KIT CASE STEER READY NODE MNT	1-117-0197-044	$49.00
KIT SMRTRX 3D NODE UPGR V/EPRO	1-117-0197-050	$4,560.00
KIT CIH MGNM/SPX 3320 NODE MNT	1-117-0197-078	$46.00
KIT SMTRX 3D NODE HF WR CRZRII	1-117-0197-099	$4,785.00
KIT SMTRX 3D NODE HFVLV CRZRII	1-117-0197-100	$4,785.00
KIT INST PG 6X00/7X00 WILLMAR	1-117-0230-016	$2,150.00
KIT INST PG AS SERIES APACHE	1-117-0230-017	$1,620.00
KIT INST PG SUMMERS (-2004)	1-117-0230-033	$1,830.00
KIT INS PG SCHABEN	1-117-0230-034	$1,830.00
KIT INS PG W/SCREEN FLEXICOIL	1-117-0230-041	$1,830.00
KIT INS PG 110'120'132'TOPAIR	1-117-0230-059	$1,925.00
KIT INS PG ULTI NT 132'SUMMER	1-117-0230-067	$1,830.00
KIT INS PG68FC'07/SRX 80-100'	1-117-0230-070	$1,830.00
KIT INS PG68FC'07/SRX 120-134	1-117-0230-071	$1,830.00
KIT PG SELF PROP CIH4420/3320	1-117-0230-075	$1,830.00
KIT PG SELF PROP APACHE 05-06	1-117-0230-076	$1,705.00
KIT INST PG FAST 9600 80-100'	1-117-0230-096	$1,830.00
KIT INS PG+ 2200HT/2275NT/2200	1-117-0231-004	$4,695.00
KIT INS PG+ 4920 JD	1-117-0231-011	$2,495.00
KIT INS PG+ 4700 JD -1998	1-117-0231-012	$2,495.00

KIT INS PG+ 8500 WILLMAR EAGLE	1-117-0231-014	$2,495.00
KIT INS PG+ 6X00&7X00 WILLMAR	1-117-0231-016	$2,495.00
KIT INS PG+ ROGATOR -1997	1-117-0231-018	$2,495.00
KIT INS PG+ 4700 JD 1999+	1-117-0231-019	$2,495.00
KIT INS PG+ 4720 JD	1-117-0231-020	$2,495.00
KIT INS PG+ 67 FLEXI-COIL	1-117-0231-024	$2,495.00
KIT INST PG+ GREGSON MY08- FAS	1-117-0231-031	$2,495.00
KIT PG+ 555/570/580/655 RDBALL	1-117-0231-035	$2,495.00
KIT INS PG+ BESTWAY 2008 & OLD	1-117-0231-036	$2,495.00
KIT INS PG+ CIH 2002+ SN3805+	1-117-0231-039	$2,495.00
KIT INS PG+ 67 FLEXI W/SCREEN	1-117-0231-041	$2,495.00
KIT INS PG+ 64/74/SS ROGATOR	1-117-0231-044	$2,495.00
KIT INS PG+ SPX3310 CIH	1-117-0231-046	$2,495.00
KIT INS PG+ PRED GVM MY2007-	1-117-0231-050	$2,495.00
KIT INS PG+ TERRAGATOR	1-117-0231-053	$2,495.00
KIT INS PG+ ULT NT 132' SUMMER	1-117-0231-067	$2,495.00
KIT INS PG+ CIH 80'90'100'	1-117-0231-070	$2,495.00
KIT INS PG+ CIH 120' 134'	1-117-0231-071	$2,495.00
KIT INS PG+ 670/680 REDBALL	1-117-0231-073	$2,495.00
KIT INS PG+ 4420/3320 CIH	1-117-0231-075	$2,495.00
KIT AUTOBM PG+ APACHE 05-06	1-117-0231-076	$2,495.00
KIT INST PG+ NITRO 4000 MILLER	1-117-0231-082	$4,695.00
KIT INST PG+ 08 PREDATR/PROWLR	1-117-0231-083	$4,695.00
KIT INST PG+ 4930 JOHN DEERE	1-117-0231-084	$2,495.00
KIT INST PG+ 7X60 SPRA COUPE	1-117-0231-086	$2,495.00
KIT INST PG+ ROG 2009 & NEWER	1-117-0231-087	$2,495.00
KIT INST PG+ 4420/3320 CIH120'	1-117-0231-088	$2,495.00
KIT INST PG+ 4420/3320 W/ATFLD	1-117-0231-091	$4,695.00
KIT INST PG+ VERSATILE SX275	1-117-0231-097	$4,695.00
KIT INST PG+ SCHABEN 8650 120'	1-117-0231-104	$2,495.00
KIT INS UG 854/1254 ROG 1997+	1-117-0232-001	$4,085.00
KIT INS UG 2200HT/2275NT2200SS	1-117-0232-004	$7,165.00
KIT INS UG 3150/3185 CIH-2005	1-117-0232-005	$4,085.00
KIT INS UG 4700 JD -1998	1-117-0232-012	$3,715.00
KIT INS UG 8500 WILLMAR EAGLE	1-117-0232-014	$3,715.00
KIT INS UG 554/854 ROG -1997	1-117-0232-018	$4,085.00
KIT INS UG FAST	1-117-0232-023	$3,715.00
KIT INS UG 67 FLEXI-COIL W/O	1-117-0232-024	$3,715.00
KIT INS UG MY 09/EAGLE HZ BM	1-117-0232-026	$3,715.00
KIT INS UG HARDI FORCE	1-117-0232-028	$3,715.00
KIT INST UG GREGSON MY08- FASS	1-117-0232-031	$3,420.00
KIT INS UG SCHABEN 8500/8650	1-117-0232-034	$3,420.00
KIT UG 555/570/580/655 REDBALL	1-117-0232-035	$3,420.00
KIT INS UG BESTWAY	1-117-0232-036	$3,420.00
KIT INS UG CIH 2005+ SN 3805+	1-117-0232-039	$3,715.00
KIT INS UG 67 FLEXI W/SCN-2006	1-117-0232-041	$3,420.00
KIT INS UG 3200/B CIH SN -3804	1-117-0232-042	$4,085.00
KIT INS UG ROGATOR 64/74/86/SS	1-117-0232-044	$3,715.00
KIT INST UG HAGIE 254/2100	1-117-0232-048	$3,715.00
KIT INS UG 7X50 SPRA COUPE	1-117-0232-049	$5,230.00
KIT INS UG PRED GVM MY2007-	1-117-0232-050	$3,420.00
KIT INS UG 6103/8103/9203 TERR	1-117-0232-053	$4,085.00
KIT INS UG XLRD SPRYR SPEC LJ	1-117-0232-054	$3,420.00
KIT INS UG 110/120/132 TOP AIR	1-117-0232-059	$3,420.00
KIT INS UG 690 REDBALL	1-117-0232-066	$3,420.00
KIT INS UG FLX/CIH 80/90/100	1-117-0232-070	$3,420.00

KIT INS UG FLX/CIH 120' 134'	1-117-0232-071	$3,420.00
KIT INS UG 680 REDBALL	1-117-0232-073	$3,420.00
KIT INS UG APACHE 2005 & 2006	1-117-0232-076	$3,715.00
KIT INST UG MILLER PULLTYPE	1-117-0232-078	$3,420.00
KIT INST UG 3150/3185/PAT 06+	1-117-0232-079	$4,085.00
KIT INST UG 08 PREDATR/PROWLR	1-117-0232-083	$7,165.00
KIT INST UG 7X60 SPRA COUPE	1-117-0232-086	$3,715.00
KIT INST UG ROG 2008, 2009	1-117-0232-087	$3,715.00
KIT INST UG XLRD SPRYR SPEC07+	1-117-0232-089	$3,420.00
KIT INST UG CIH 120'W/ATFLD	1-117-0232-091	$7,165.00
KIT INS UG CONDOR G-SRS MONO	1-117-0232-094	$7,165.00
KIT INST UG FAST 9600 80-100'	1-117-0232-096	$3,420.00
KIT INST UG VRSTILSX275/RB7830	1-117-0232-097	$7,165.00
KIT INST UG SPRCP 7X60 2010+	1-117-0232-098	$7,460.00
KIT INST UG 4630 JD	1-117-0232-100	$3,715.00
KIT INST UG GRGSN -MY08 FASSE	1-117-0232-101	$3,420.00
KIT INST UG MS T1000 CNDR	1-117-0232-102	$3,715.00
KIT INST UG NITRO/GUARD N5 SER	1-117-0232-107	$7,165.00
KIT INST UG MLR GC SRS MONO BM	1-117-0232-108	$7,165.00
KIT INST UG MLR GC SRS SPR AIR	1-117-0232-109	$7,165.00
KIT INST ISO UG MILLER CON/GUA	1-117-0232-113	$7,165.00
KIT INST ISO UG MILLER CON/GUA	1-117-0232-114	$7,165.00
KIT INST ISO UG NITRO/GUARD N5	1-117-0232-115	$7,165.00
KIT STEER SMRTRX CIH MX180/200	1-117-0295-006	$2,445.00
KIT STEER SMRTRX ROG 854 '98+	1-117-0295-014	$2,445.00
KIT STEER SMRTRX CNHFLX43XX99+	1-117-0295-018	$2,445.00
KIT STEER SMRTRX JD 4700	1-117-0295-019	$2,445.00
KIT STEER SMRTRX GVM PRWLR -07	1-117-0295-020	$2,445.00
KIT STEER SMRTRX ROG 854 -'96	1-117-0295-025	$2,445.00
KIT STEER SMRTRX CIH SPX OC	1-117-0295-030	$2,445.00
KIT STEER SMRTRX SPRACOUPE3000	1-117-0295-032	$2,445.00
KIT STEER SMRTRX TRGTR 1903	1-117-0295-037	$2,445.00
KIT STEER SMRTRX MERTZ/TYLER	1-117-0295-041	$2,445.00
KIT STEER SMRTRX FORDNH W/O HI	1-117-0295-046	$2,445.00
KIT STEER SMRTRX GVM PRED SPRA	1-117-0295-053	$2,445.00
KIT STEER SMRTRX MELROE SPRACO	1-117-0295-058	$2,445.00
KIT STEER SMRTRX CIH MX100/110	1-117-0295-059	$2,445.00
KIT STEER SMRTRX CIH 89X0/72X0	1-117-0295-064	$2,445.00
KIT STEER SMRTRX AGCO DT 160/1	1-117-0295-065	$2,445.00
KIT STEER SMRTRX AGCO ALLIS 96	1-117-0295-066	$2,445.00
KIT STEER SMRTRX CIH 21XX 23XX	1-117-0295-068	$2,445.00
KIT STEER SMRTRX NITRO N2/N2XP	1-117-0295-069	$2,445.00
KIT STEER SMRTRX CAT B/C/D SRS	1-117-0295-070	$2,445.00
KIT STEER SMRTRX CIH MXM 120/1	1-117-0295-074	$2,445.00
KIT STEER SMRTRX CAT SRS 35/45	1-117-0295-077	$2,445.00
KIT STEER SMRTRX MILLER MD/CON	1-117-0295-083	$2,815.00
KIT STEER SMRTRX GVM PRWLR 120	1-117-0295-085	$2,445.00
KIT STEER SMRTRX SERVSPRAY3000	1-117-0295-092	$2,445.00
KIT STEER CAT-LEXION 500 SRS	1-117-0295-095	$2,445.00
KIT STEER CAT E SRS65/75/85/95	1-117-0295-096	$2,445.00
KIT CAN ACBM CIH 3310 W/AIM	1-117-1004-002	$660.00
KIT CAN ACBM CIH 4410 W/O AIM	1-117-1004-003	$485.00
KIT CAN ACBM 1254 ROG	1-117-1004-008	$485.00
KIT CAN ACBM 64/74 SRS ROG	1-117-1004-010	$485.00
KIT CAN ACBM 7000 SRS SPRACOUP	1-117-1004-012	$485.00
KIT CAN ACBM GVM PRWLR/PRDTR	1-117-1004-014	$485.00

KIT CAN ACBM CIH SPX CAN PROD	1-117-1004-020	$485.00
KIT CAN ACBM 1274 ROG 7 BM	1-117-1004-022	$485.00
KIT CAN ACBM CIH3320/4420	1-117-1004-023	$485.00
KIT CAN ACBM 460 CIH SPX 3150/	1-117-1004-030	$485.00
KIT CAN ACBM 440/450/460/660/6	1-117-1004-039	$485.00
KIT CAN ACBM SCS4400 STD	1-117-1004-040	$660.00
KIT CAN ACBM SCS460 HAGIEDTS10	1-117-1004-042	$660.00
KIT CAN ACBM AGCO TRGTR W/LIQ	1-117-1004-044	$485.00
KIT CAN ACBM CIH SRVYR CAB W/O	1-117-1004-047	$485.00
KIT CAN ACBM CIH FLX 10 SRS	1-117-1004-049	$1,180.00
KIT CAN ACBM SPRAY AIR 2010	1-117-1004-050	$446.00
KIT CAN ACBM JD 4700/4710/4720	1-117-1004-051	$446.00
KIT CAN ACBM MD SRS CONDOR A	1-117-1004-053	$555.00
KIT CAN ACBM AGCO INCAB COMBO	1-117-1004-063	$660.00
KIT CAN ACBM 4600/VIPER HAGIE	1-117-1004-064	$1,000.00
KIT CAN ACBM REDBALL SP	1-117-1004-065	$555.00
KIT CAN ACBM CIH SPX W/AIM	1-117-1004-066	$485.00
KIT CAN ACBM CIH SPX CAN PROD	1-117-1004-068	$485.00
KIT CAN ACBM CIH 4X00/VIPER W/	1-117-1004-069	$485.00
KIT CAN ACBM CIH SPX3185/3200	1-117-1004-070	$485.00
KIT CAN ACBM LIQ/TRGTR AIRMAX/	1-117-1004-071	$660.00
KIT CAN ACBM GVM PRED/PROW	1-117-1004-072	$485.00
KIT CAN ACBM UNIV 10 SECTIONS	1-117-1004-073	$660.00
KIT CAN ACBM MILLER CONDOR G-S	1-117-1004-076	$555.00
KIT CAN ACBM 7460/7660 SPRCOUP	1-117-1004-077	$660.00
KIT CAN ACBM HAGIE STS SRS	1-117-1004-079	$358.00
KIT CAN ACBM 10SECT UNIV 3WIRE	1-117-1004-081	$660.00
KIT CAN ACBM CIH 3230/3320/333	1-117-1004-082	$485.00
KIT CAN ACBM HAGIE DTS2100/01	1-117-1004-083	$358.00
KIT PLNTR ELECT ACRW/MNTR LEV1	1-117-3001-012	$2,555.00
KIT PLANTER ACCUROW	1-117-3001-016	$1,490.00
KIT AIRBAG BRKT OFFSET KINZE	1-117-3001-017	$12.00
KIT SEAL HYD MOTOR OMNIROW	1-117-3001-019	$81.00
KIT REPL CONN SNSR HYD MTR OMN	1-117-3001-020	$17.00
KIT RUN BLKG AGTRON	1-117-3001-023	$1,990.00
KIT CART OMNSD 3 BIN	1-117-3001-026	$6,635.00
KIT CART OMNSD 4 BIN	1-117-3001-027	$7,860.00
KIT CART OMNSD 5 BIN	1-117-3001-028	$8,780.00
KIT MTR MNTG JD 1910	1-117-3001-031	$154.00
KIT MTR MNTG MORRIS	1-117-3001-032	$128.00
KIT MTR MNTG CNH FLEXICOIL	1-117-3001-033	$128.00
KIT MTR MNTG BOURGAULT	1-117-3001-034	$128.00
KIT CART OMNSD 1 BIN	1-117-3001-035	$4,800.00
KIT CART OMNSD 2 BIN	1-117-3001-036	$5,715.00
KIT RUN BLKG 2ND LOOP AGTRON	1-117-3001-037	$464.00
KIT ULTRASONIC SNSR OMNISEED	1-117-3001-038	$424.00
KIT PRSS SW AIR CART	1-117-3001-039	$358.00
KIT MTR MNT HI RATE BOURGAULT	1-117-3001-040	$540.00
KIT MTR MNTG LOW RATE MORRIS	1-117-3001-041	$540.00
KIT PRESSURE/VACUUME	1-117-3001-045	$179.00
KIT PLNTR/SDR AUX MNTRG	1-117-3001-047	$1,050.00
KIT PLNTR/SDR AUX CONTROL	1-117-3001-048	$1,940.00
KIT OMNIROW 2 MOTORS JD	1-117-3001-051	$4,595.00
KIT OMNIROW 4 MOTORS JD	1-117-3001-052	$6,025.00
KIT OMNIROW 2 MOTORS KINZE	1-117-3001-053	$4,595.00
KIT OMNIROW 4 MOTORS KINZE	1-117-3001-054	$6,025.00

KIT OMNIROW 2 MOTOR CASE	1-117-3001-055	$4,595.00
KIT OMNIROW 4 MOTORS CASE	1-117-3001-056	$6,025.00
KIT OMNIROW 2 MOTORS WHITE	1-117-3001-057	$4,595.00
KIT OMNIROW 4 MOTORS WHITE	1-117-3001-058	$6,025.00
KIT HYD MTR RTN CIH MX	1-117-3002-079	$57.00
KIT HYD MTR RTN JD HI FLOW	1-117-3002-080	$92.00
KIT HYD MTR RTN JD LOW FLOW	1-117-3002-081	$46.00
KIT OMNRW CIH 1230 12R30 SECT	1-117-3C12-014	$8,060.00
KIT OMNRW CIH1200/1240 12R30 S	1-117-3C12-024	$8,060.00
KIT OMNRW CIH 1250 12R30 SECT	1-117-3C12-034	$8,060.00
KIT OMNRW CIH 1230 16R30 MR8X2	1-117-3C16-012	$11,735.00
KIT OMNRW CIH 1200/1240 16R30	1-117-3C16-022	$11,735.00
KIT OMNRW CIH 1250 16R30 SECT	1-117-3C16-034	$8,060.00
KIT OMNRW CIH 1250 24R30 MR8X3	1-117-3C24-012	$13,165.00
KIT OMNRW JD1770/7200 12R30	1-117-3J12-011	$13,540.00
KIT OMNRW JD1770/7200 12R30	1-117-3J12-014	$8,060.00
KIT OMNRW JD1770NT 12R30 IRC	1-117-3J12-021	$13,540.00
KIT OMNRW JD1770NT 12R30	1-117-3J12-024	$8,060.00
KIT OMNRW JD1760 12R30 IRC	1-117-3J12-031	$13,540.00
KIT OMNRW JD1760 12R30	1-117-3J12-034	$8,060.00
KIT OMNRW JD1720 12R30 IRC	1-117-3J12-041	$13,540.00
KIT OMNRW JD1720 12R30	1-117-3J12-044	$8,060.00
KIT OMNRW JD1770/7200 16R30	1-117-3J16-011	$18,050.00
KIT OMNRW JD1770/7200 16R30 MR	1-117-3J16-012	$11,735.00
KIT OMNRW JD1770/7200 16R30	1-117-3J16-014	$8,060.00
KIT OMNRW JD1770NT 16R30 IRC	1-117-3J16-021	$18,050.00
KIT OMNRW JD1770NT 16R30 MR	1-117-3J16-022	$11,735.00
KIT OMNRW JD1770NT 16R30	1-117-3J16-024	$8,060.00
KIT OMNRW JD1770NT 16R30 IRC	1-117-3J16-031	$18,050.00
KIT OMNRW JD1720 16R30 MR	1-117-3J16-032	$11,735.00
KIT OMNRW JD1720 16R30	1-117-3J16-034	$8,060.00
KIT OMNRW HD1770/7200 24R30	1-117-3J24-011	$27,075.00
KIT OMNRW JD1770/7200 24R30 MR	1-117-3J24-012	$13,165.00
KIT OMNRW JD1770/7200 24R30 MR	1-117-3J24-013	$17,245.00
KIT OMNRW JD1770NT 24R30 IRC	1-117-3J24-021	$27,075.00
KIT OMNRW JD1770NT 24R30 MR	1-117-3J24-022	$13,165.00
KIT OMNRW JD1770NT 24R30 MR	1-117-3J24-023	$17,245.00
KIT OMNRW JD DB60 24R30 IRC	1-117-3J24-031	$27,075.00
KIT OMNRW JD DB60 24R30 MR 8X3	1-117-3J24-032	$13,165.00
KIT OMNRW JD DB60 24R30 MR12X2	1-117-3J24-033	$17,245.00
KIT OMNRW JD DB44 24R22 12X2	1-117-3J24-042	$17,245.00
KIT OMNRW JD1790 24R20 MLT12X2	1-117-3J24-052	$17,245.00
KIT OMNRW KINZE3200/2200 12R30	1-117-3K12-011	$13,540.00
KIT OMNRW KNZ 32/2200 12R30	1-117-3K12-014	$8,060.00
KIT OMNIROW KINZE 12/23-24 INT	1-117-3K12-015	$17,245.00
KIT OMNRW KINZE3600/2600 12R30	1-117-3K12-021	$13,540.00
KIT OMNRW KNZ 36/2600 12R30	1-117-3K12-024	$8,060.00
KIT ONMRW KINZE3600/2600 16R30	1-117-3K16-011	$18,050.00
KIT OMNRW KINZE 3660/3600/2600	1-117-3K16-012	$11,735.00
KIT OMNRW KNZ 36/2600 16R30	1-117-3K16-014	$8,060.00
KIT OMNRW KINZE 16/31-32 INT	1-117-3K16-015	$19,290.00
KIT OMNRW KINZE3700/2700 24R30	1-117-3K24-011	$27,075.00
KIT OMNRW KINZE3700/2700 24R30	1-117-3K24-012	$13,165.00
KIT OMNRW KINZE3700/2700 24R30	1-117-3K24-013	$17,245.00
KIT OMNRW KINZE 3800 24R30 IRC	1-117-3K24-021	$27,075.00
KIT OMNRW KINZE 3800 24R30 MR	1-117-3K24-022	$13,165.00

KIT OMNRW WHT8202/8222 12R30 S	1-117-3W12-014	$8,060.00
KIT OMNRW WHT 8182 12R30 SECT	1-117-3W12-034	$8,060.00
KIT OMNRW WHT 8186 16R30 SECT	1-117-3W16-014	$8,060.00
KIT OMNRW WHT 8516 16R30 MR	1-117-3W16-022	$11,735.00
KIT OMNRW WHT 8816 16R30 MR	1-117-3W16-042	$11,735.00
KIT OMNIROW WHITE 8816 16R30	1-117-3W16-043	$11,735.00
KIT OMNRW WHT 8524 24R30 MR8X3	1-117-3W24-012	$13,165.00
KIT OMNRW WHT 8524 24R30 MR	1-117-3W24-013	$17,245.00
KIT OMNRW WHT 8824 24R30 MR8X3	1-117-3W24-022	$13,165.00
KIT OMNRW WHT 8824 24R30 MR	1-117-3W24-023	$17,245.00
KIT STEER TERR 8XX4 TC	1-117-4001-011	$2,445.00
KIT STEER ROG 1254 TC	1-117-4001-015	$2,445.00
KIT STEER CNH FLX40X0/45X0 TC	1-117-4001-023	$2,815.00
KIT STEER CNH SPX/TYLR PAT TC	1-117-4001-027	$2,445.00
KIT STEER TERR 1803 TC	1-117-4001-028	$2,445.00
KIT STEER ROG 64/74/SS TC	1-117-4001-031	$2,445.00
KIT STEER MERTZ-SLVWHL3004 TC	1-117-4001-040	$2,445.00
KIT STEER APCH 700/859/AS-09TC	1-117-4001-044	$2,395.00
KIT STEER CNH FLX 30X0/35X0 TC	1-117-4001-045	$2,815.00
KIT STEER SPRCP 765X/7660 TC	1-117-4001-056	$2,445.00
KIT STEER HAGIE 2100/2101 TC	1-117-4001-057	$2,445.00
KIT STEER CIH SPX3310 TC	1-117-4001-078	$2,445.00
KIT STEER ROG 1286C/84 TC	1-117-4001-084	$2,445.00
KIT STEER MILLER NITRO N4 TC	1-117-4001-087	$2,815.00
KIT SMRTRX ROG RG900/1100/1300	1-117-4001-090	$2,815.00
KIT STEER TERR 6203/82XX TC	1-117-4001-093	$2,445.00
KIT SMRTRX VERSATILE SX275 TC	1-117-4001-100	$2,815.00
KIT SMRTRX RBR VCT/VRTX 300 TC	1-117-4001-101	$2,815.00
KIT STR SMRTRX MLLR CNDR G-SRS	1-117-4001-103	$2,815.00
KIT STEER SMRTRX APCH AS20 SRS	1-117-4001-104	$2,815.00
KIT STEER GVM PRWLR 2011 TC	1-117-4001-105	$2,445.00
KIT SMRTRX CIH TITAN 3030/3530	1-117-4001-116	$2,815.00
KIT SMRTRX CIH TITAN 4030/4530	1-117-4001-117	$2,815.00
KIT EPRO W/O GPS 2USB PORTS	1-117-5010-002	$2,840.00
KIT EPRO II W/MBA6 ANT SLNGSHT	1-117-5010-009C	$5,995.00
KIT EPRO II W/MBA06 GS-SAT	1-117-5010-009D	$5,995.00
KIT EPROII W/MBA-6 RTK GLNS	1-117-5010-009KG	$7,995.00
KIT EPROII SCALABLE GPS	1-117-5010-009L	$3,695.00
KIT VIPER 4 W/O GPS NO ANTENNA	1-117-5010-010B	$4,995.00
KIT VPR4 W/GPS MBA6 ANT SLNGSH	1-117-5010-010C	$8,995.00
KIT VIPER 4 W/GPS MBA-6 RTK GL	1-117-5010-010KG	$10,995.00
KIT VIPER 4 W/GPS NO ANTENNA	1-117-5010-010L	$6,695.00
KIT RAVEN CAN SWBOX TO EPRO	1-117-5020-001	$650.00
KIT RAVEN CAN SWBOX TO VPRO	1-117-5020-002	$650.00
KIT RAVEN CAN SWBOX TO SCS5000	1-117-5020-003	$650.00
KIT SMARTSTEER 3D	1-117-5030-002	$1,850.00
KIT SMRTRX 3D CNTRLLR 0295	1-117-5030-003	$4,430.00
KIT SMRTRX 3D CNTRLLR 4001	1-117-5030-004	$4,430.00
KIT SMRTRX 3D CNTRLLR 5XXX	1-117-5030-005	$4,430.00
KIT STEER SMRTRX RBR VECT 300	1-117-5030-010	$8,160.00
KIT SMRTRX HAGIE STS 2007-2011	1-117-5030-011	$3,595.00
KIT SMRTRX RTK MCCORMICK MTX	1-117-5030-017	$3,535.00
KIT CNTRLR SMRTRX MD TRNSFR	1-117-5030-019	$1,175.00
KIT CNTRLR SMRTRX MD*	1-117-5030-020	$3,995.00
KIT INST SMRTRX MD 7/8 X 36*	1-117-5030-021	$500.00
KIT INST SMRTRX MD 5/8 X 36*	1-117-5030-022	$500.00

KIT CNTRLR SMRTRX MD UPGRADE*	1-117-5030-023	$3,195.00
KIT SMRTSTR 3D CRZR	1-117-9001-031	$3,405.00
KIT INST SMRTRX MD JD 4X40/50*	1-117-5030-030	$500.00
KIT INST SMRTRX MD CASE MAG*	1-117-5030-031	$500.00
KIT INST SMRTRX CASE IH PUMA/*	1-117-5030-032	$500.00
KIT INST SMRTRX MD JD8000/9000*	1-117-5030-033	$500.00
KIT INST SMRTRX MD JD 6X20/30*	1-117-5030-034	$500.00
KIT INST SMRTRX MD AGCO CHALL*	1-117-5030-035	$500.00
KIT INST SMRTRX MD JD 7X00/10*	1-117-5030-038	$500.00
KIT INST SMRTRX MD CASE MX*	1-117-5030-039	$500.00
KIT INST SMRTRX AG-CHEM RG SS*	1-117-5030-040	$500.00
KIT INST SMRTRX BUHLER/VERS RC*	1-117-5030-041	$500.00
KIT INST SMRTRX JD 6X20/30 7X2*	1-117-5030-042	$500.00
KIT INST SMRTRX MD JD 50/60/70*	1-117-5030-050	$500.00
KIT INST SMRTRX CASE X010/X120*	1-117-5030-051	$500.00
KIT INST SMRTRX CIH 21XX/23XX*	1-117-5030-052	$500.00
KIT INST SMRTRX MD BUHLER/VERS*	1-117-5030-060	$500.00
KIT INST SMRTRX CASE IH STX/QD*	1-117-5030-061	$500.00
KIT INST SMRTRX MD CASEIH*	1-117-5030-062	$500.00
KIT INST SMRTRX JD 8X60/8X70*	1-117-5030-063	$500.00
KIT INST SMRTRX BUHL/VERS 305-*	1-117-5030-064	$500.00
KIT STR BUHLER/VRSTL 305-575	1-117-5031-001	$3,540.00
KIT STR BHLR/VERS RC 250-305	1-117-5031-002	$3,540.00
KIT STR RDY BHLR/VERS 4WD 2012	1-117-5031-003	$5,775.00
KIT STEER SMRTRX BUH/VER 2360	1-117-5031-007	$3,540.00
KIT SMRTRX CASE MAG NHT80X0 ST	1-117-5032-001	$5,775.00
KIT SMRTRX STEIGER/QUAD STR RD	1-117-5032-002	$5,775.00
KIT SMRTRX CASEIH 210/215/230/	1-117-5032-003	$3,540.00
KIT SMRTRX STGR STX NH TJ '06-	1-117-5032-004	$3,540.00
KIT SMRTRX CIH PUMA NH70X0 W/O	1-117-5032-005	$3,540.00
KIT STR SMRTRX CASE 91/92/93XX	1-117-5032-006	$3,540.00
KIT SMRTRX CIH PUMA NH T70X0/T	1-117-5032-007	$5,775.00
KIT SMRTRX PUMA 115-160 NH 2WD	1-117-5032-008	$3,540.00
KIT SMRTRX PUMA115-16 NH MFWD	1-117-5032-009	$3,540.00
KIT SMRTRX CIH MX/MGNM NHTG 5	1-117-5032-010	$3,540.00
KIT CASE TITAN 30SRS VPRO/EPRO	1-117-5032-011	$5,775.00
KIT CASE TITAN 30 V/EPRO P200	1-117-5032-012	$7,585.00
KIT CASE 3230/3320/3330 E/VPRO	1-117-5032-013	$5,775.00
KIT CSE 3230/3320/3330 P200 E/	1-117-5032-014	$7,585.00
KIT CASE 4420 SMTRX E/VPRO 09	1-117-5032-015	$5,775.00
KIT CASE 4420 P200 E/VPR 09 NE	1-117-5032-016	$7,740.00
KIT STRG SMRTX CASE PAT 4420	1-117-5032-017	$3,595.00
KIT SMTRX CASE 4410/4420	1-117-5032-018	$3,595.00
KIT SMRTRX CIH STX NH TJ	1-117-5032-020	$3,540.00
KIT SMTRX CASE 5/6/7008 COMBIN	1-117-5032-021	$3,540.00
KIT SMTRX CASE 2588 COMBINE	1-117-5032-023	$3,540.00
KIT SMRTX CIH X010/X120/X230	1-117-5032-024	$5,775.00
KIT STRG SMARTRAX CASE IH SPX	1-117-5032-081	$3,595.00
KIT STEER CIH PAT 4430 MY2012	1-117-5032-082	$3,595.00
KIT CIH PAT 4430 3D VPRO/EPRO	1-117-5032-083	$5,775.00
KIT CASE PAT 4430 3D VPRO/EPRO	1-117-5032-084	$7,585.00
KIT CASE PAT 250/NH SP3500 3D	1-117-5032-085	$5,775.00
KIT CASE PAT 250/NH SP3500 SMR	1-117-5032-086	$3,595.00
KIT SMRTRX CHLLNGR TRACK MTSRS	1-117-5033-001	$5,775.00
KIT SMRTRX AGCO/MF/CHLNGR MFWD	1-117-5033-002	$3,595.00
KIT SMRTRX MASSEY FERG 82X0	1-117-5033-003	$3,540.00

KIT SMTRX AGCO CHALLENGER MT	1-117-5033-004	$3,540.00
KIT MF AGCO CHALL STR RDY	1-117-5033-005	$5,775.00
KIT SMRTRX VALTRA BH 180/185I/	1-117-5033-100	$3,540.00
KIT SMRTRX VALTRA BT	1-117-5033-101	$3,540.00
KIT SMRTRX VALTRA T HITECH	1-117-5033-102	$3,540.00
KIT SMRTRX JD 7X30 STEER READY	1-117-5034-001	$5,775.00
KIT SMRTRX JD 8000 STEER READY	1-117-5034-002	$5,775.00
KIT SMRTRX JD 9000/9020 STRRDY	1-117-5034-003	$5,775.00
KIT SMARTRAX JD 7X00 7X10	1-117-5034-004	$3,540.00
KIT SMRTRX JD 7X20 LRG FRAME	1-117-5034-005	$3,540.00
KIT SMRTRX JD 8X00/8X10	1-117-5034-006	$3,540.00
KIT SMRTRX JD 8X20	1-117-5034-007	$3,540.00
KIT SMRTRX JD 7X00/7X10 2WD	1-117-5034-008	$3,540.00
KIT SMRTRX JD SER TIER IV STR	1-117-5034-010	$5,775.00
KIT SMRTRX JD SM FRAME MFWD	1-117-5034-011	$3,540.00
KIT SMRTRX JD 1204	1-117-5034-012	$3,540.00
KIT JD 8R SRS MY 2009-10 STRDY	1-117-5034-013	$5,775.00
KIT SMTRX JD50/60/70 COMINE SR	1-117-5034-014	$5,895.00
KIT SMTRX JD 70 COMBINE SR	1-117-5034-015	$5,895.00
KIT SMTRX JD 9X00 9X20 9X30	1-117-5034-016	$3,540.00
KIT SMRTRX RTK JD 6X20/6X30 SM	1-117-5034-019	$5,775.00
KIT SMRTRX STEER JD 8X70/8X60	1-117-5034-020	$3,540.00
KIT PROD CNTRLR LIQ 16 PIN	1-117-5100-001	$1,720.00
KIT PROD CNTRLR LIQ 37 PIN	1-117-5100-002	$1,835.00
KIT PROD CNTRLR LIQ 22 PIN	1-117-5100-003	$2,045.00
KIT PROD CNTRLR MULTI-PROD SYS	1-117-5100-004	$2,045.00
KIT PRD CNTRL 37PIN INTEGRATE	1-117-5100-012	$1,830.00
KIT CAN ATBM PG+	1-117-5130-001	$2,205.00
KIT CAN ATBM UG 90' BM & SMLR	1-117-5130-002	$3,225.00
KIT CAN ATBM UG 100'-132' BM	1-117-5130-003	$3,225.00
KIT ATBM STND ALONE CNSL GENII	1-117-5130-004	$1,025.00
KIT ATBM STND ALONE CNSL MILLE	1-117-5130-005	$1,025.00
KIT CAN ACCUFLOW HP 3 SECT BAR	1-117-5300-001	$1,990.00
KIT CAN ACCUFLOW HP 6 SECT BAR	1-117-5300-002	$2,155.00
KIT ISOBUS SWBX 6SECT-ISOBUSVT	1-117-6020-001	$510.00
KIT RVN ISOBUS SWBX 6SCT-JDGS3	1-117-6020-002	$615.00
KIT ISO PROD LIQUID 16 PIN	1-117-6100-001	$1,610.00
KIT ISO PROD LIQ/GRAN 37 PIN	1-117-6100-002	$1,670.00
KIT ISO PROD LIQ/GRAN 22 PIN	1-117-6100-003	$1,750.00
KIT ISOBUS ACFL HP 3 SECT BAR	1-117-6300-001	$1,955.00
KIT ISOBUS ACFL HP 6 SECT BAR	1-117-6300-002	$2,090.00
KIT MOISTURE SNS MTG BUBBLE UP	1-117-9000-012	$65.00
SADDLE MOLDED POLY	1-118-0159-007	$78.00
COVER TANK VENT F THREAD ARAG	1-118-0159-043	$7.65
CAP MOLDED 3"ID	1-118-0159-044	$1.65
ANT NMO MNT CELL QUAD BAND	1-121-0000-031	$33.00
ANT NMO MNT CELL 3DB RAYDOME	1-121-0000-032	$80.00
ROD HEX NYL BLK 7/8"	1-211-0002-001	$28.00
HOSE NH3	1-214-0001-046	$104.00
TUBE VAPOR .750 OD	1-214-0002-002	$8.75
VAPOR TUBE 1/2" NH3	1-214-0002-003	$8.75
GASKET TEFLON WASHER 1 1/4	1-219-0000-091	$4.35
GASKET HEAT EXCHANGER	1-219-0000-142C	$8.60
GASKET FLANGED HEAT EXCHANGER	1-219-0000-143	$12.00
GSKT RTNR FLNG HEAT EXCH	1-219-0000-144	$21.00
GASKET TFLN WSHR 1 1/2" STRNR	1-219-0000-154	$15.00

GASKET TEFLON WSHR 2" STRAINER	1-219-0000-161	$21.00
O-RING	1-219-0001-005	$1.30
SPR COIL 12.25L X 1.88ID	1-314-0000-015	$43.00
SHOCK ABSORBER CUSHIONED GAGE	1-321-0000-355	$54.00
SPR RTNR BRL END SHK ABSORB	1-321-0000-365	$5.45
SPR RTNR ROD END SHK ABSORB	1-321-0000-366	$5.45
BRG ROD END SLS190 W/BB 5MM	1-325-0000-020	$44.00
BRG ROD END SLS320 W/BB 10MM	1-325-0000-021	$71.00
ORIFICE HYD.500 ODX.25ID SHIM	1-333-0002-203	$15.00
ORIFICE HYD .060DIA FLOAT HEX	1-333-0002-204	$11.00
ORIFICE HYD .0465D FLOAT HEX	1-333-0002-222	$9.70
FILTER 120 MICRON -8 SAE ORB	1-333-0002-223	$63.00
FTG BUSHING PIPE 1 1/2X1 1/4	1-333-0003-019	$7.25
COUPLING 2 1/2" GRVD EPDM GSKT	1-333-0006-031	$87.00
COUPLING 2"X1.5" GRVD EPDM GSK	1-333-0006-032	$87.00
CHECK VALVE 5 PSI PP	1-333-0011-001	$9.05
CHECK VALVE 5GPM .5 PSI 3/8 SS	1-333-0011-078	$83.00
CHECK VALVE .5 PSI 1 1/4" S.S.	1-333-0011-082	$279.00
FTG CHK VLV BALL/SPRNG SS1 1/2	1-333-0011-083	$410.00
CHECK VALVE .5 PSI 2" S.S.	1-333-0011-084	$640.00
CHECK VALVE 1/2 PSI DELRIN	1-333-0011-087	$21.00
CHECK VALVE 1/2" 8GPM	1-333-0011-088	$39.00
CHECK VALVE 1" 14GPM	1-333-0011-090	$60.00
CHECK VALVE 1 1/4" 22GPM	1-333-0011-091	$75.00
CHECK VALVE 2" 70GPM	1-333-0011-093	$183.00
CHECK VALVE 3" 110GPM	1-333-0011-094	$309.00
VLV CHK 1/2" 12 PSI W/BLEED HL	1-333-0011-100	$76.00
CHK VLV 1/2" 12PSI EXTRM VITON	1-333-0011-102	$75.00
FTG PLUG 7/16-20 O-RING SEAL	1-333-0012-051	$1.80
FTG PLUG -6 O-RING INTERNAL HX	1-333-0012-104	$2.70
FTG PLUG 3/4"-16 ORING SEAL	1-333-0012-211	$15.00
FTG PLUG -2 SAE O-RING INT HEX	1-333-0012-262	$1.15
FTG HYD ORIFICE .060 W/1/4-20	1-333-0012-284	$4.55
MIXER 3" DIA SS	1-333-9000-010	$620.00
STRAINER Y-TYPE 1 1/4" NH3	1-333-9000-025	$67.00
SCREEN 20 MESH 1 1/4" Y-STRAIN	1-333-9000-032	$35.00
FTG STRAINER YTYPE 1 1/2" PIPE	1-333-9000-066	$56.00
FTG 20 MESH SCRN 1 1/2" Y-STRN	1-333-9000-067	$23.00
FTG 40 MESH SCREEN 2" STRAINER	1-333-9000-071	$88.00
VLV PWM BRAND 10GPM	1-334-0001-042	$600.00
NEEDLE VLV 1/4 NPT MALE/FEMALE	1-334-0001-064	$61.00
VLV RLF 1/4NPT SS	1-334-0002-005	$35.00
VLV CARTG SUN DTDA-MCN	1-334-0002-061	$205.00
VLV HYD PRESS RDC/RELIEVE	1-334-0002-069	$398.00
VLV HYD SOL CLOSE DBL	1-334-0002-070	$173.00
VLV HYD PRESS REDUC/RELIEVE	1-334-0002-072	$126.00
CARTG HYD PROP RDC/RLVG -08	1-334-0002-106	$207.00
CARTG HYD BLOCKER DBL -08	1-334-0002-107	$88.00
CARTG HYD SEQ -10	1-334-0002-108	$64.00
CARTG HYD PRESS RDC/RLVG -08	1-334-0002-110	$88.00
CRTDG HYD LS PLUG	1-334-0002-137	$88.00
MANIFOLD HYD OVERRIDE W/FTGS	1-334-0003-024	$600.00
COIL 12V HYD FLOW PRESS CONTRL	1-334-0003-032	$47.00
VALVE MAIN PILOT RELIEF ELECT	1-334-0003-033	$272.00
ELEMENT MOD 3 WAY VALVE PRESS	1-334-0003-058	$131.00
VALVE RELIEF -8 WITH BODY	1-334-0003-074	$111.00

Replacement Parts

VALVE LOGIC SPL PILOT-CLOSE A	1-334-0003-075	$149.00
MANIFOLD HYD OVERRIDE W/FTGS	1-334-0003-085	$412.00
ADPTR TNC PLUG TO BNC JACK	1-407-4001-005	$12.00
SNSR BIN LVL CPCTV DEUTSCH	1-412-6000-008	$148.00
RELAY SPST 40AMP VF4 SERIES	1-415-1001-009	$8.70
PUMP CENTRIFUGAL, ACCUFLOW HP	1-416-1001-009	$2,235.00
PUMP NH3 HP+	1-416-1001-010	$3,670.00
MOTOR HYD 7/8" HEX 1GPM IRC	1-416-8000-001	$605.00
GAUGE PRESS AMMONIA 0-250 PSI	1-417-0001-030	$160.00
GAUGE TEMP BACK MOUNT	1-417-0001-031	$123.00
MAGNET CERAMIC ROUND .87DIAX1	1-418-0000-001	$4.10
KIT MAGNETIC MTG INVICTA ANTEN	1-418-0000-008	$81.00
CABLE PWR 12VDC AUTO 5.5X2.5MM	1-420-1011-008	$21.00
CABLE ULTSN SNSR W/3PIN SHROUD	1-420-2002-028	$30.00
CBL ETHERNET CAT5E PTCH 60"BLK	1-420-2002-038	$12.00
CABLE PWR BLUETREE MODEM	1-420-2002-043	$50.00
SWITCH PRESS MICRO HD W/90 DEG	1-422-0000-074	$341.00
SWITCH PRESS 6-50BAR ADJ W/FTG	1-422-0000-075	$327.00
XDCR PRESS P51-3000S-I-MD-20MA	1-422-0000-081	$287.00
XDCR PRESS 4-20MA 0-3000 PSI	1-422-0000-086	$184.00
KIT TRNSDCR PRESS 0-250PSI SS	1-422-0000-090	$272.00
XDCR PRESS 1-5V 0-3000 PSI	1-422-0000-093	$258.00
SNSR PLNTR HIGH RATE DJ	1-422-0000-100	$97.00
SNSR SPD 200PSI HYD MTR OMNIRW	1-422-0000-101	$128.00
SNSR AGTRON SEED RATE 1.00"	1-422-0000-102	$102.00
SNSR AGTRON SEED RATE 1.00"	1-422-0000-102	$102.00
SNSR AGTRON SEED RATE 1.25"	1-422-0000-103	$102.00
SNSR AGTRON SEED RATE 1.25"	1-422-0000-103	$102.00
SNSR AGTRON SEED RATE 7/8"	1-422-0000-104	$102.00
SNSR AGTRON SEED RATE 7/8"	1-422-0000-104	$102.00
SNSR AGTRON SEED RATE 15/16"	1-422-0000-105	$102.00
SNSR AGTRON SEED RATE 15/16"	1-422-0000-105	$102.00
SNSR PLNTR HI RATE CNH12XX SRS	1-422-0000-107	$154.00
CLAMP HOSE	1-435-3003-004	$1.15
CLAMP STAINLESS HOSE	1-435-3003-009	$5.10
BATTERY AA LITHIUM	1-507-2001-006	$12.00
FLASH DRIVE USB 4GB	1-524-0002-065	$30.00
BACKUP UPS 110VAC 1500VA REMOT	1-525-0001-056	$700.00
BACKUP UPS 220VAC 1500VA REM	1-525-0001-057	$700.00
MIX-ALL ELEC AGITATOR 3" BLADE	1-910-0000-331	$895.00
MIX-ALL ELEC AGITATOR 4" BLADE	1-910-0000-341	$970.00
RADAR INTERFACE DICKY JOHN	9-063-0159-598	$287.00
30 GAL AGITATOR INSTALLED	9-063-0159-678	$715.00
KIT RADAR WITH POWER CABLE	9-117-0159-822	$595.00
KIT WIRELESS SWBOX 210/310 VER	9-117-0159-937	$281.00
KIT MOTOR CONT CAN W/AGIT 35'	9-117-0171-029	$1,060.00

Table of Contents
Alphabetized Listing

A

Accessories 100-101
Accessory Cables 103, 113
AccuBoom™ 59-65
AccuFlow HP™ Plus Pump and Plumbing Components 82
AccuFlow™ 78-80
AccuFlow™ Vortex & AccuFlow HP™ Plus 81-82
AccuFlow™ Vortex & AccuFlow HP™ Plus Replacement Parts 81-82
AccuRow™ 112-113
AGCO 18, 26, 34, 40, 49, 62, 67
AGCO White 102
Agitator Kits 85
Air Cart Accessories 109
Antennas 30
Anti-Ice 93-94
Apache 18, 40, 49
Application Controls 68-95
Application Equipment 18-20, 22-23
Authorization Codes, CAN Product Controller 89
AutoBoom® 48
AutoBoom® 33-47, 49-58
Auxiliary Monitoring & Control Extension Cables 105
Auxiliary Product Control (Reference Raven drawing 109
Auxiliary Product Control Extension Cables 110
Axle Kits 35

B

Base Station Antenna & Cables 10
Bestway 41, 51
Boom Controls 33-67
Boom Sense or Open Center/LS Coil Cables 57
Brand Specific Air Cart Install Kits (Select One Kit per bin) 109
Buhler 19, 40, 49

C

Cable Kits 67
Cables 1, 8, 27, 80
Cables & Components 78
Cables & Components, Cruizer II™ 12-13
Cables & Components, Cruizer II™, Weather Resistant 13
Cables, AccuFlow HP™ Plus 81
Cables, CAN Multi-Product System 89
Cables, CAN Product Control 91
Cables, CAN Product Controller 89
Cables, CAN SmarTrax™ 3D 17
Cables, Envizio Pro™, Envizio Pro II®, and Envizio Pro XL™ 4
Cables, GPS Receivers 28
Cables, Lightbars 31
Cables, SCS 440/450/460/660™ 69
Cables, SCS 4400/4600 68
Cables, SCS-Sidekick™ 84
Cables, Sidekick Pro™ 83
Cables, Switch Pro™ 86
Cables, Viper Pro™ 3
Cables, Viper® 4 1
Cables/Components, CropStart II™ 114
Cables/Components, CropStart™ 114
CAN 62-65
CAN AutoBoom Console Kits 39, 48
CAN Center Sensor Kits 52
CAN Components & Cabling 71
CAN Dual Ultrasonic Sensor Kits 52-53
CAN Nodes 70
CAN Power Tee Kit & Extension Cables 39, 48
CAN PowerGlide Plus 36-44
CAN PowerGlide Plus Controller Kits 39
CAN SmarTrax™ 3D 14-24
CAN UltraGlide 45-54
CAN UltraGlide Controller Kits 48
CaseIH 20-21, 26, 34, 40, 49, 62-63, 67, 101
CAT 21
Center Rack Control Cables 57
Center Rack Control Upgrade Kits 52
Chassis Cables 90
Check Valves 75
Combine 21-23
Combine Console and Power Harness 116
Compoments 8
Components 27
Components & Cables, ISO Injection 84
Components Included in Cable Assemblies 76
Components, CAN Product Controller 88
Components, Envizio Pro™, Envizio Pro II®, and Envizio Pro XL™ 5
Components, GPS Receivers 28
Components, Header Height Sensor 116
Components, ISO Product Control 72
Components, Lightbars 31
Components, RAM Mount 90
Components, Raven CAN Switch Box 90
Components, SCS-Sidekick™ 84
Components, Sidekick Pro™ 83
Components, Switch Pro™ 86
Components, Viper Pro™ 3
Components, Viper® 4 1
Control and On/Off Valve Components 82
Control Valves 74
Controller Kit 67
Controller Kits, CAN AccuFlow™ 80
Controller Kits, CAN SmarTrax™ 3D 17
CropStart™ 114
Cruizer Care 13
Cruizer II™ 12-13

D

DCS 300 Liquid Anti-Ice 93
DCS 310 Liquid Anti-Ice 93
DCS 400 Liquid Anti-Ice 93
DCS 410 Liquid Anti-Ice 93
DCS 700/710 Liquid Anti-Ice 94
Dickey-John/Vansco Radars 76
DLA 336 94
Down Pressure Monitoring (Reference Raven drawing 110
Down Pressure/Proximity Switch Extension Cables 110

E

Enable Switches 27
Envizio Pro II® 4-7
Equipment Technologies 34, 63
Extension Cables 103, 110
Extension Cables, AccuRow™ 113

F

Fast 34, 41, 51
Fendt 26
Field Computers 1-8
Flexicoil 34, 41, 51
Flow Max™ 92
Flow Max™ 110 Flow Monitor 92
Flow Max™ 221 Flow Monitor 92

Table of Contents
Alphabetized Listing

F

Flow Max™ 810 Flow Monitor 92
Flow Meter Components 82
Flow Monitor Cables (3 pin weatherpack connector) 83
Flowmeters 92
For Systems With A Single Node Connection 53
For Systems With Inner & Outer Sensor Connections 52
Ford 26
Ford New Holland 21
From Base Level 2, 6, 29
From SBAS + GLONASS 2, 6, 29
From SBAS + GS + GLONASS 2, 6
From SBAS + GS + GLOSS 29

G

G1 Replacement Parts 55
G1 to UltraGlide Update 44
G2 Replacement Parts 55
Gauge Tree and Sensor Components 82
GEN I 3-4, 13, 17, 71, 86
GEN I 12
GEN II 1, 3-4, 13, 17, 26, 88, 90
Generic 26
Generic Kits 65
Generic OmniSeed Air Cart Kits 109
GPS Receiver - Compatibility Requirements 2, 6
GPS Receivers 28-30
GPS Software, SBAS/RTK Capable, Envizio Pro II® 6
GPS Software, Viper® 4 2
Granular Encoder 73
Granular Options 73
Gregson 41, 51
Guidance & Steering 12-32
GVM 21, 40, 49, 63

H

Hagie 22, 49, 63
Hardi 42, 51
Harvest Controls 115-116
How To Order 97
How To Order (continued) & Hydraulic Flow Requirements 98
How to order AccuBoom™ with GEN I Cabling 60
How to order AccuBoom™ with GEN II Cabling 61
How to Order an OmniSeed™ System 108
How to order AutoBoom® PowerGlide Plus with GEN II Cabling 37
How to order AutoBoom® PowerGlide Plus with ISOBUS Cabling 38
How to order AutoBoom® UltraGlide kit with ISOBUS Cabling 47
How to order AutoBoom® UltraGlide with GEN II Cabling 46
How to order CAN SmarTrax™ 3D with GEN I Cabling 15
How to order CAN SmarTrax™ 3D with GEN II Cabling 16
How to Order SmartBoom™ Kits 66
Hydraulic Control Valves 75

I

Injection Check Valves 84
Injection Components 85
Inlet Plumbing Components 81
In-Line Mixers 85
Install Kits 26-27
Interface Cables 10, 67
Interface Cables, Viper Pro™ and Envizio Pro II® 7
ISO Adapter & Implement Extension Tee Cables 39, 48
ISO Injection Pumps, Sidekick Pro™ 84
ISO PowerGlide Plus Controller Kits 39
ISO PowerGlide Plus to UltraGlide Upgrade 43
ISO Product Control 72
ISO UltraGlide Controller Kits 48
ISOBUS Hitch Cables 72

J

John Deere 26
John Deere 22, 40, 50, 64, 67, 99

K

Kinze 100
Kit, Level I Node 88
Kit, Level III Node 88
Kits consisting of two strut assemblies 35
Kits, AccuFlow™ Vortex & AccuFlow HP™ Plus 81
Kits, AccuRow™ 113
Kits, CAN Product Controller 88
Kits, CropStart™ 114
Kits, Cruizer II™ 12
Kits, Cruizer II™, Weather Resistant 12
Kits, Cruizer II™/Weather Resistant RTK 12
Kits, Envizio Pro II® 4
Kits, Envizio Pro XL 4
Kits, Envizio Pro™ 4
Kits, GPS Receivers 28
Kits, ISO Product Control 72
Kits, Lightbars 31
Kits, Other 78
Kits, Raven CAN Switch Box 90
Kits, Raven ISO VT 8
Kits, Raven ISOBUS Switch Box 72
Kits, Sidekick Pro™ 83
Kits, Single Cooler 78
Kits, SmarTrax™ MD 26-27
Kits, SmartYield™ Pro 116
Kits, Switch Pro™ 86
Kits, Viper Pro™ 3
Kits, Viper® 4 1

L

Level I OEM Sectiol Base Kit 99-102
Level II Raven Sectiol Kits 99-102
Level III Brand Specific MultiRow Kits 99-102
Level III MultiRow Kits 99-102
Level IV IndiRow Kits 99-100
Lexion 22
Lightbars 31-32

M

Macdon 22
Machine-Specific Kits 35
Machine-Specific Steering Kits, CAN SmarTrax™ 3D 18-24
Magvox/Phillips Radars 76
Manual System Control Valves 74
Manuals, CropStart™ 114
Manuals, Cruizer II™ 13
Manuals, Envizio Pro™, Envizio Pro II®, and Envizio Pro XL™ 7
Manuals, GPS Receivers 30
Manuals, Lightbars 32
Manuals, Viper Pro™ 3
Manuals, Viper® 4 2
McCormick 23
Mertz 23
Miller 23, 34, 41-42, 50-51, 64
Miller ISOBus 50
Miscellaneous 75
Miscellaneous Components 77
Miscellaneous Components, SCS-Sidekick™ 84
Miscellaneous, Lightbars 31

Table of Contents
Alphabetized Listing

M

Mix-All Agitators (48" shaft cut to desired length) 85
Motor Controls 85
Motor Return Kits 103
MS 51

N

New Holland 64
New Holland 23, 27, 50
New Holland ISOBus 50
NH3 Cables for Multi Section Bar 80
NH3 Cables for Single Section Bar 80
NH3 On/Off Valve Extension Cables 80
Node Control Kits 62

O

OmniRow® 96-106
OmniSeed™ 107-111
OmniSTAR to GS Unlocks (No Charge Unlocks) 2, 6
On/Off Valves 74, 92
Open Center Conversion Kits, CAN PowerGlide Plus 57
Optiol RAM Mount Components to Remote-Mount Consoles 87
Other Service Parts and Components 7
Outlet Plumbing Components 82

P

P300 (Compatibility Requirements) for GS 29
P300 with USB (OmniSTAR to GS Unlocks (No Charge Unlocks)) 29
P300 with USB (Upgrade to GS Corrections and/or RTK) 29
Planter & Seeder Controls 96-114
Planter Auxiliary Monitoring & Control Cables 105
Planter Auxiliary Monitoring & Product Control 104-106
Planter Auxiliary Sensors 104
Planter Seed Sensor Harness Extension Cables 103
Power/CAN ‘T’ Extension Cables 110
Power/CAN Chassis and Field Computer/Console Cab Cables 89
Power/CAN Extension Cables 103, 106, 113
Power/CAN Extension Cables 90, 110
Power/CAN T Extension Cables 106
Power/CAN Tee Implement Extensions 90
PowerGlide 33-35
PowerGlide / PowerGlide Plus / UltraGlide Replacement Parts 56
PowerGlide Controller Kit 34
PowerGlide Plus to UltraGlide Upgrade (Round Coil Valve) 43
PowerGlide Plus to UltraGlide Upgrade (Square Coil Valve) 42
Pressure Transducer 70
Pull-Type Kits, CAN PowerGlide Plus 41-42
Pull-Type Kits, CAN UltraGlide 51-52
Pull-Type Kits, PowerGlide 34-35

R

Radar Speed Sensor Cables 95
Radar Speed Sensor Interface Cable 76
Raven CAN GEN II Product Controls 88
Raven ISO VT 8
Raven OmniRow® Planter Monitoring & Control Systems 96
Raven Radar 95
Raven Radar to Third Party Adapter 95
Raven Radars 76
RBR 23
Redball 42, 51, 64
Remote Section Control 62
Replacement Parts 11, 104, 111, 113, 117-141
Replacement Parts, AccuFlow HP ™ 82
Replacement Parts, AccuFlow™ 79
Replacement Parts, AutoBoom® 55-58
Replacement Parts, CAN SmarTrax™ 3D 24
Replacement Parts/Accessories 116
RFM Flow Meters 73
RTK Base Station Kits and Backup Power Supplies 10
RTK Base Station Only 10
Run Blockage Powered By Agtron (Reference Raven 109

S

Schaben 34, 42, 52
SCS 11™ 69
SCS 203™ 69
SCS 223™ 69
SCS 330™ 70
SCS 4070™ 68
SCS 4400™ 68
SCS 440™ 68
SCS 450/460™ 69
SCS 4600™ 68
SCS 5000™ 68
SCS 660™ 69
SCS Consoles 68-70
SCS-Sidekick™ 84-85
Self-Propelled Kits, AccuBoom™ 62-64
Self-Propelled Kits, CAN PowerGlide Plus 40-41
Self-Propelled Kits, CAN UltraGlide 49-51
Self-Propelled Kits, PowerGlide 34
Serial 62-65
Servspray 24
Sidekick Pro™: Direct Injection 83-84
Sidekick™: Direct Injection 84-85
Single Product Node Cables (GEN II) 70
Slingshot Field Hub Installation Kit 10
Slingshot Field Hub Kits 10
Slingshot Field Hub Only 10
Slingshot® 9-11
SmartBoom™ 66-67
SmarTrax™ MD 25-27
SmartYield™ Pro 115-116
Software, Cruizer II™ 13
Software, Envizio Pro™, Envizio Pro II®, and Envizio Pro XL™ 5
Software, GPS Receivers 29
Software, Viper Pro™ 3
Software, Viper® 4 1
Speed Sensor Extension Cables 95
Speed Sensors 75-76
Speed Sensors, Cables, and Components 75-76
Spline Adapter Sets 27
Spra-Coupe 41, 50, 64
Spray-Air 64
Sprayer Specialties 52
Standard 67
Standard Gauge Wheels (optiol) 54
Standard Pull Type Sprayers 65
Subscriptions & Activations 10
Summers 34, 42, 52
Switch Pro™ 86-87
Switchboxes, Lightbars 31

T

Tanks and Saddles 85
Tee Jet 67
Third Party Radar to Raven Speed Sensor Interface Cable 95
Tilt 30
Top Air 35, 42, 52
Touchdown "Little Wheel" Wheel Kits (optional) 35, 43
Tractor 18

Table of Contents
Alphabetized Listing

T

Tractor	19, 21-23
Tractor Components	95
TRW Radars	76

U

Universal	67
Update Cables	58
Upgrade to GS Corrections and/or RTK	2, 6
Upgrades, CAN SmarTrax™ 3D	24
US Sensor Extension Cables	57

V

Valve Products	74-75
Versatile	27
Viper Pro Software	110
Viper Pro™	3
Viper® 4	1-2
Vortex Cooler and Bleed Components	82

W

Willmar	34, 41, 51
WMS Annual Licenses	10

Appendix: Application Drawings

Legacy SCS Controllers

A-1 SCS 450™ Liquid Control System
A-2 SCS 460™ Liquid Control System
A-3 SCS 660™ w/ Master Switch Granular Control System
A-4 SCS 440™ w/ AccuFlow™, Fast Valve System for Multi Section Bar

GEN I Raven CANBUS

A-5 Viper Pro™ w/ Liquid Control and CAN AccuBoom™
A-6 Envizio Pro™ w/ GPS and Granular Product Control
A-7 Viper Pro™/Envizio Pro™ with RGL 600/600ic Lightbar Options
A-8 Cruizer™ System Drawing w/ Kits, Cable Options, SmarTrax™, TM-1 and SCS Console Connection
A-9 Envizio Pro™ w/ GPS, Liquid Control, SmarTrax™, TM-1 and External Lightbar
A-10 Envizio Pro™/Viper Pro™ CAN SmarTrax™ Steiger/Quadtrac Steer-Ready w/ Phoenix 300™
A-11 Envizio Pro™/Viper Pro™ CAN SmarTrax™ Case Steer-Ready w/ Phoenix 300™
A-12 SmarTrax™ Node, P300, Cruizer™, Steiger/Quadtrac Steer-Ready
A-13 Cruizer™ w/ Helix Antenna, SmarTrax™ Node, Steiger/Quadtrac Steer-Ready
A-14 Envizio Pro™/Viper Pro™ CAN SmarTrax™/SmarTrax™ 3D w/ Phoenix 300™
A-15 CAN PowerGlide Plus and UltraGlide Systems
A-16 SCS 4400™ w/ AccuFlow™, 2 Valve System w/ Multi Section Bar
A-17 Envizio Pro™ w/ Switch Pro to SCS 440™/450™ Cabled Systems
A-18 Viper Pro™ w/ GPS, Liquid Product Control and CAN Injection

GEN II Raven CANBUS

A-19 Raven CANBUS Electrical Hardware for Tractors
A-20 GEN II System Cabling Connections
A-21 Tractor/Machine/Implement Specific Cable and Accessories
A-22 Tractor/Machine/Implement Specific Cable and Accessories, continued
A-23 Speed Sensor Adapter Cables
A-24 Speed Sensor Adapter Cables, continued
A-25 Tractor/Machine/Implement Specific Cable and Accessories w/ Dimensions

Field Computers

A-26 Envizio Pro II® w/ GPS (MBA-6 antenna)
A-27 Envizio Pro II® System Drawing w/ Kits, Cable Options, SmartYield™ Pro
A-28 Envizio Pro II® System Drawing w/ Kits, Cable Options, SmartYield™ Pro
A-29 Envizio Pro II® System Drawing w/ Kits, Cable Options, SmartYield™ Pro
A-30 Envizio Pro II® Single Section Product Control
A-31 Viper Pro™
A-32 SCS 5000™
A-33 Cruizer II™ w/ GPS

Telematics

A-34 Slingshot®/Phoenix 300™ RTK System
A-35 Slingshot®/Phoenix 300™ RTK System, Envizio Pro II® w/ GPS

Guidance & Steering

A-36 CAN SmarTrax™, Challenger MT 700/800C Steer Ready
A-37 Cruizer II™, John Deere Steer Ready w/ Phoenix 300™ and Slingshot®
A-38 Envizio Pro™/Viper Pro™ John Deere Steer Ready w/ Slingshot®
A-39 Envizio Pro™/Viper Pro™ Case IH/New Holland Steer Ready w/ Slingshot®
A-40 Cruizer II™ Case IH/New Holland Steer Ready

A-41 Cruizer II™ RTK John Deere Steer Ready
A-42 Cruizer II™ RTK Case IH Steer Ready
A-43 CAN SmarTrax™/SmartSteer™

Application Controls

A-44 Raven CAN Switch Box Kits
A-45 SCS 4400™/Sidekick Pro™ to SCS 440™ Cables
A-46 Product Controller Liquid System, 16 Pin Product Cable
A-47 Product Controller Liquid System, 37 Pin Product Cable
A-48 Product Controller Granular System, 37 Pin Product Cable
A-49 Product Controller Liquid System, 22 Pin Product Cable
A-50 Product Controller Granular System, 22 Pin Product Cable
A-51 Product Controller Multi-Product System
A-52 Product Controller 4-10 Product System
A-53 Single Product Node, GEN II
A-54 37 Pin Product Cable Option
A-55 Sidekick Pro™, CAN, Direct Chemical Injection
A-56 AccuFlow™ Vortex and AccuFlow HP™ Plus System Diagram
A-57 CAN AccuFlow HP™, 6 Section Bar

Boom Controls

A-58 Raven GEN II PowerGlide Plus and UltraGlide CAN AutoBoom®

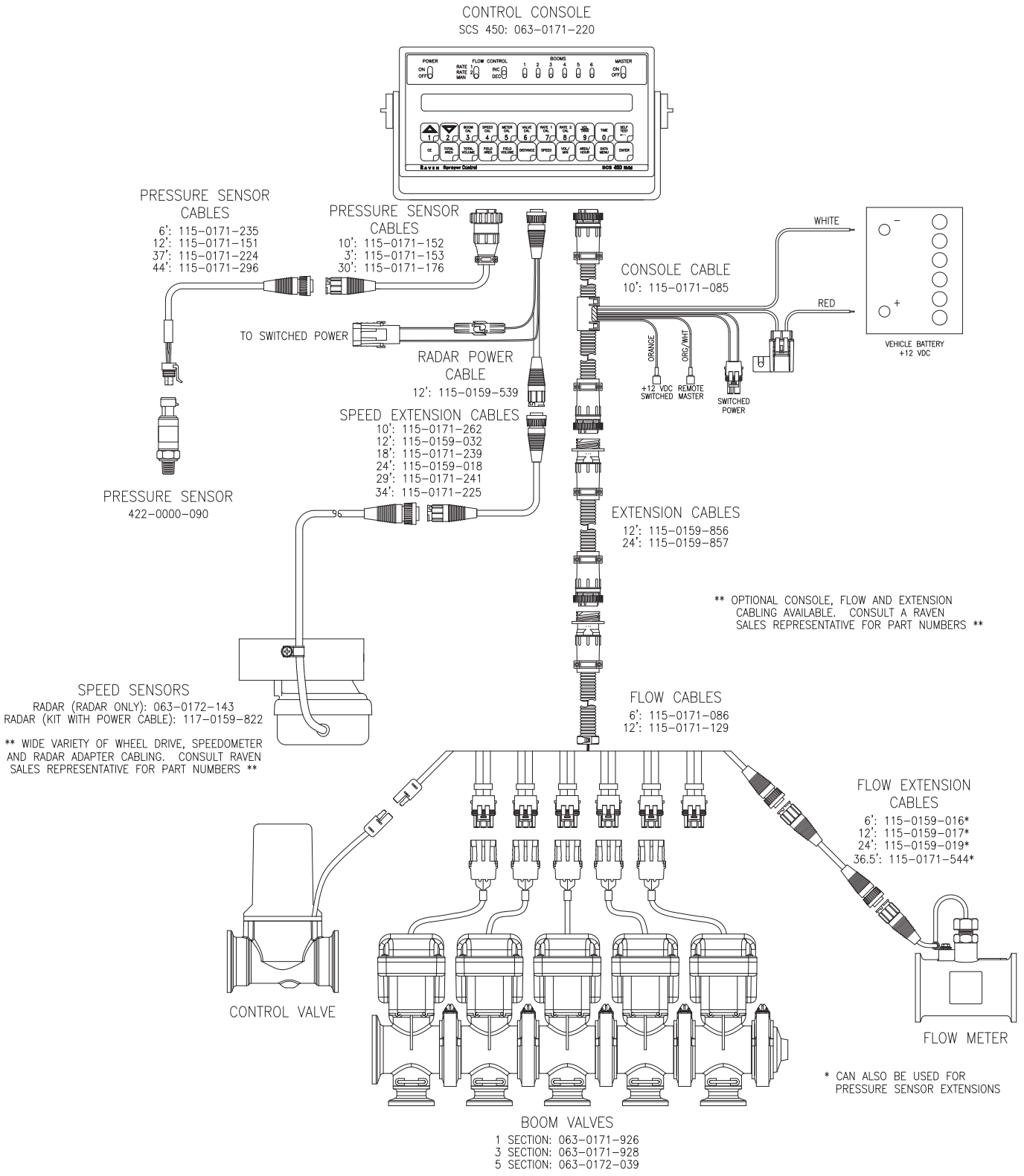
Planter & Seeder Controls

A-59 OmniRow® Level I System
A-60 OmniRow® Level I System, continued
A-61 OmniRow® Level I System, continued
A-62 OmniRow® Level II System, JD1770NT, 16 Row, 30' Spacing, Sectional (Kit 117-3J16-024)
A-63 OmniRow® Level III System, JD, 4 Motor Kit, 20"-40" Spacing, Multirow (Kit 117-3001-052)
A-64 OmniRow® Level III System, JD1770, 16 Row, 30" Spacing, Multirow (Kit 117-3J16-012)
A-65 OmniRow® Level IV System, JD1770NT, 16 Row, 30' Spacing, Individual (Kit 117-3J16-021)
A-66 Planter & Seeder Auxiliary Monitoring System
A-67 Planter & Seeder Auxiliary Control System
A-68 Supported 37 and 16 Pin Product Cables
A-69 AccuRow™ System
A-70 OmniSeed™ Cabling Connections (tow behind systems)
A-71 OmniSeed™ Cabling Connections (tow between systems)
A-72 Agtron System (less than 60 sensors)
A-73 Agtron System (more than 60 sensors)
A-74 OmniSeed™ System (3 bin)

Raven ISOBUS Compliant

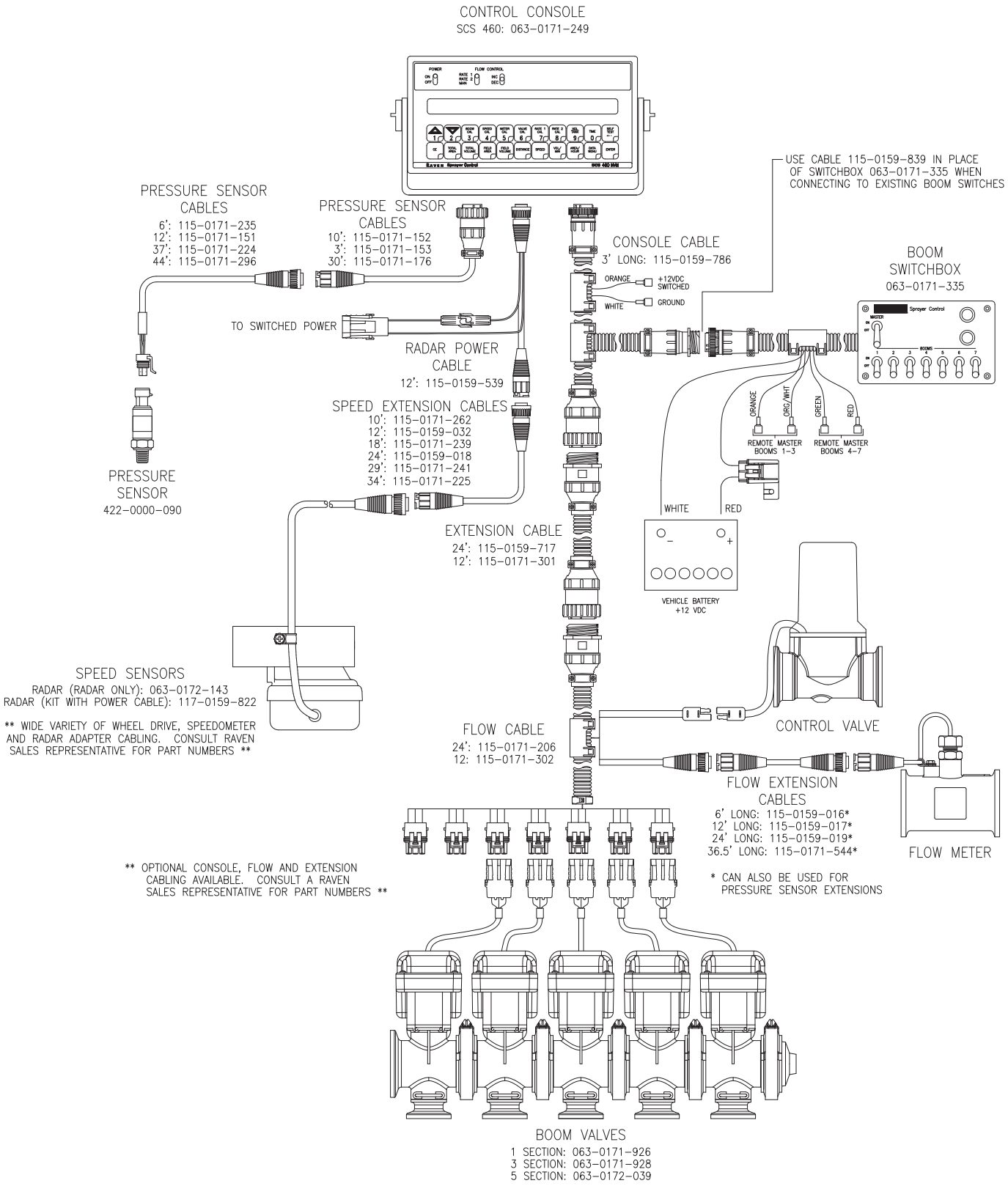
A-75 Raven ISOBUS Cabling
A-76 ISO Product Controller Liquid System, 16 Pin Product Cable
A-77 ISO Product Controller Liquid System, 22 Pin Product Cable
A-78 ISO Product Controller Granular System, 22 Pin Product Cable
A-79 ISO Product Controller Liquid System, 37 Pin Product Cable
A-80 ISO Product Controller Granular System, 37 Pin Product Cable
A-81 ISOBUS AccuFlow HP™, 6 Section Bar
A-82 Raven ISOBUS AutoBoom® w/ John Deere Rate Control
A-83 Raven ISOBUS AutoBoom® w/ Raven ISOBUS Rate Control
A-84 Raven ISOBUS AutoBoom® without ISOBUS Rate Control
A-85 Raven ISO Product Control w/ ISO Injection
A-86 John Deere Greenstar Rate Control (GRC) w/ Raven ISO Injection

SCS 450 LIQUID CONTROL SYSTEM



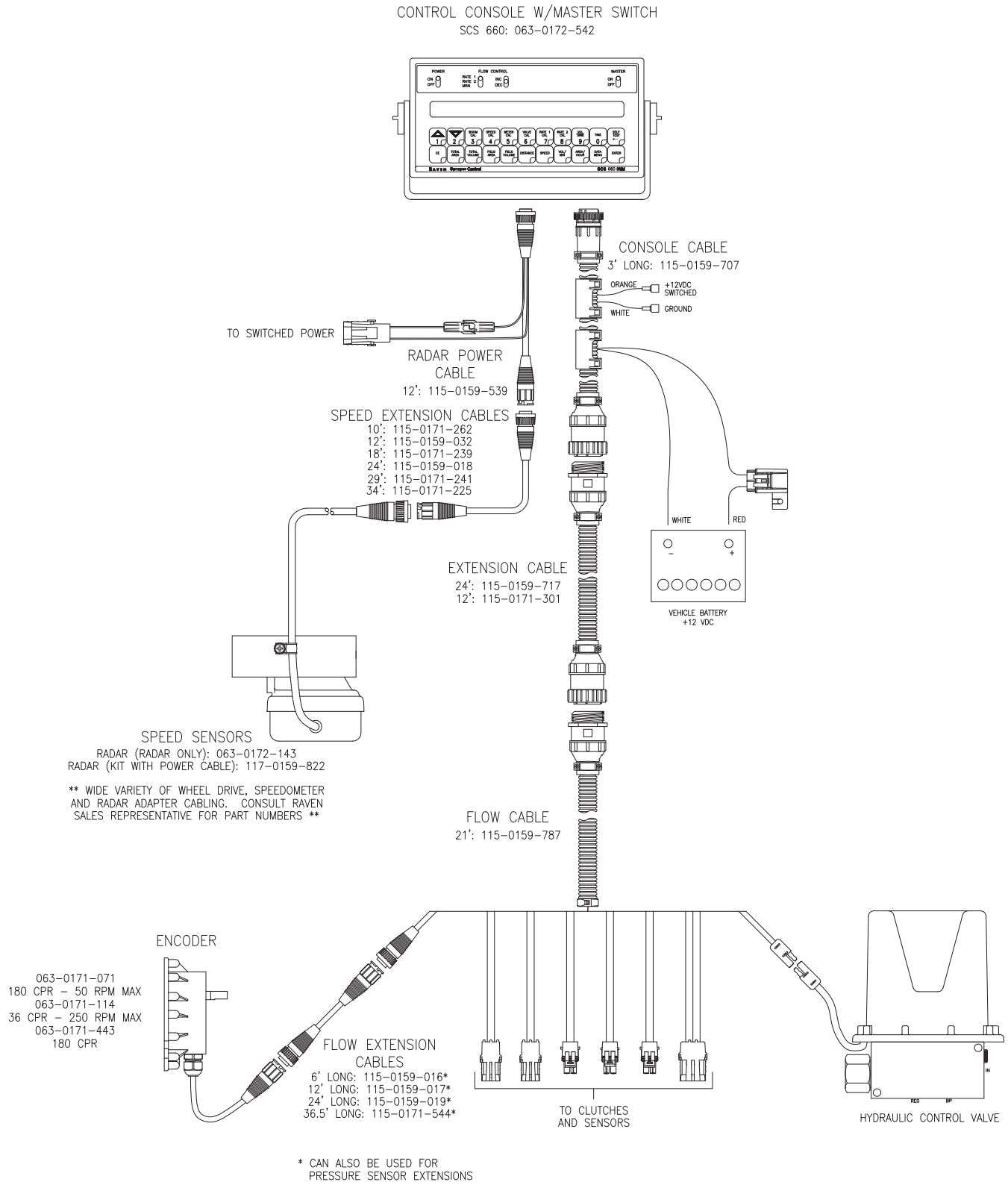
ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E13339	JB	TAC	DNR	LAA1	MAP	A	054-2800-010
E16257	JAB	AT	TJP	NAP	MAP	B	–

SCS 460 LIQUID CONTROL SYSTEM



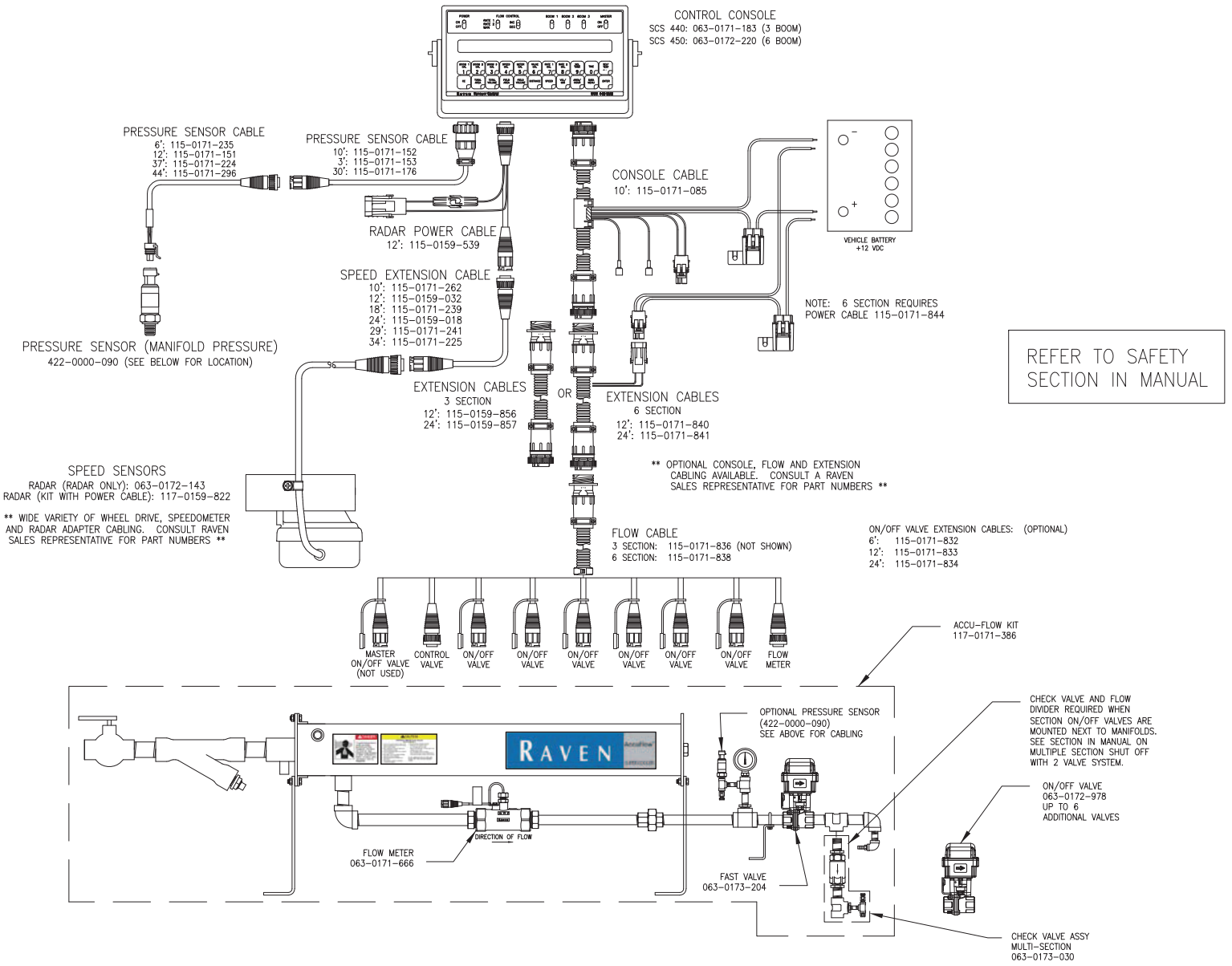
ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E13339	JB	TAC	DNR	LAA1	MAP	A	054-2810-001

SCS 660 WITH MASTER SWITCH GRANULAR CONTROL SYSTEM



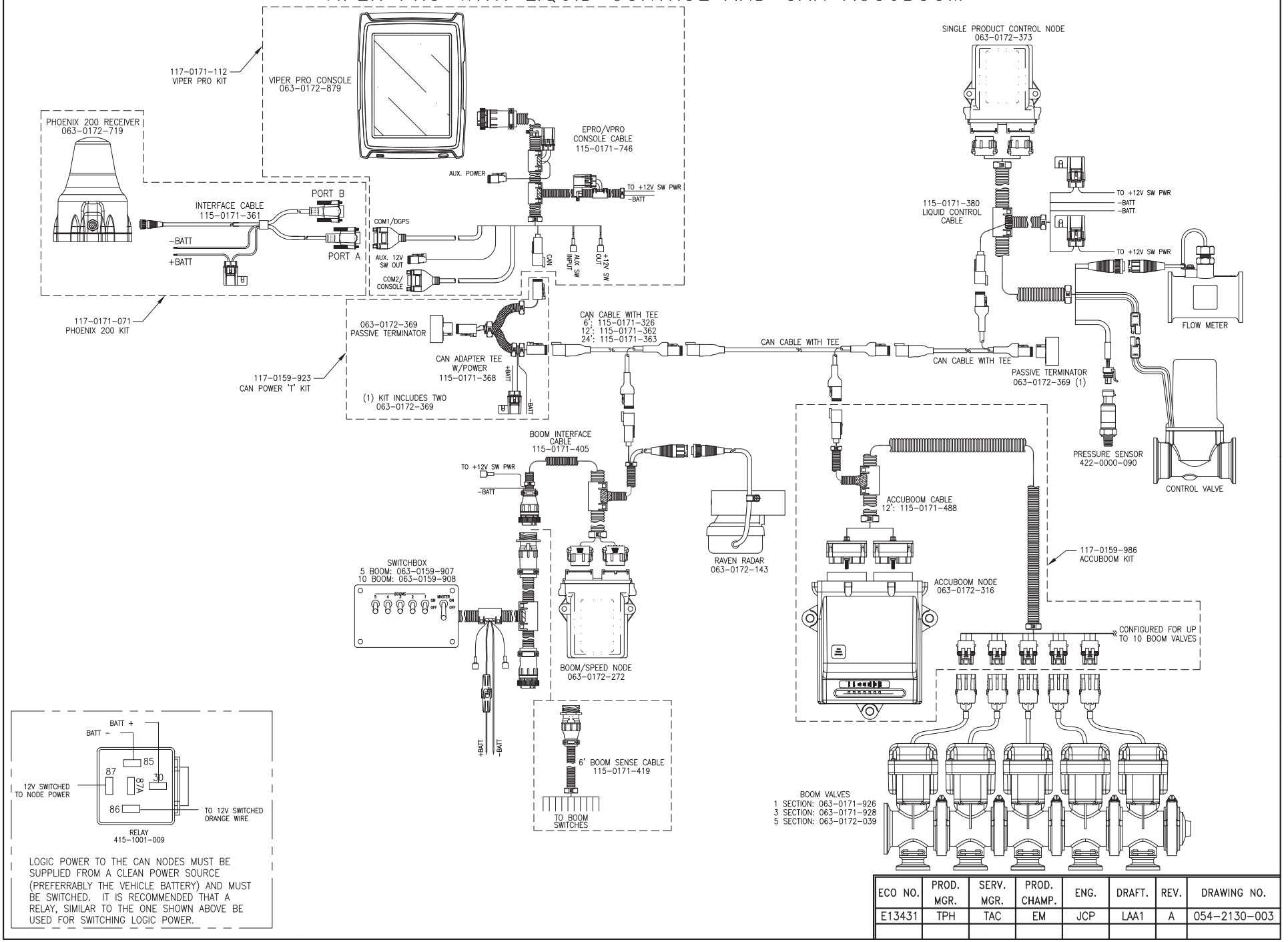
ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E13339	JB	TAC	DNR	LAA1	MAP	A	054-2810-004

SCS 440/450 WITH ACCUFLOW, FAST VALVE SYSTEM WITH MULTI SECTION BAR



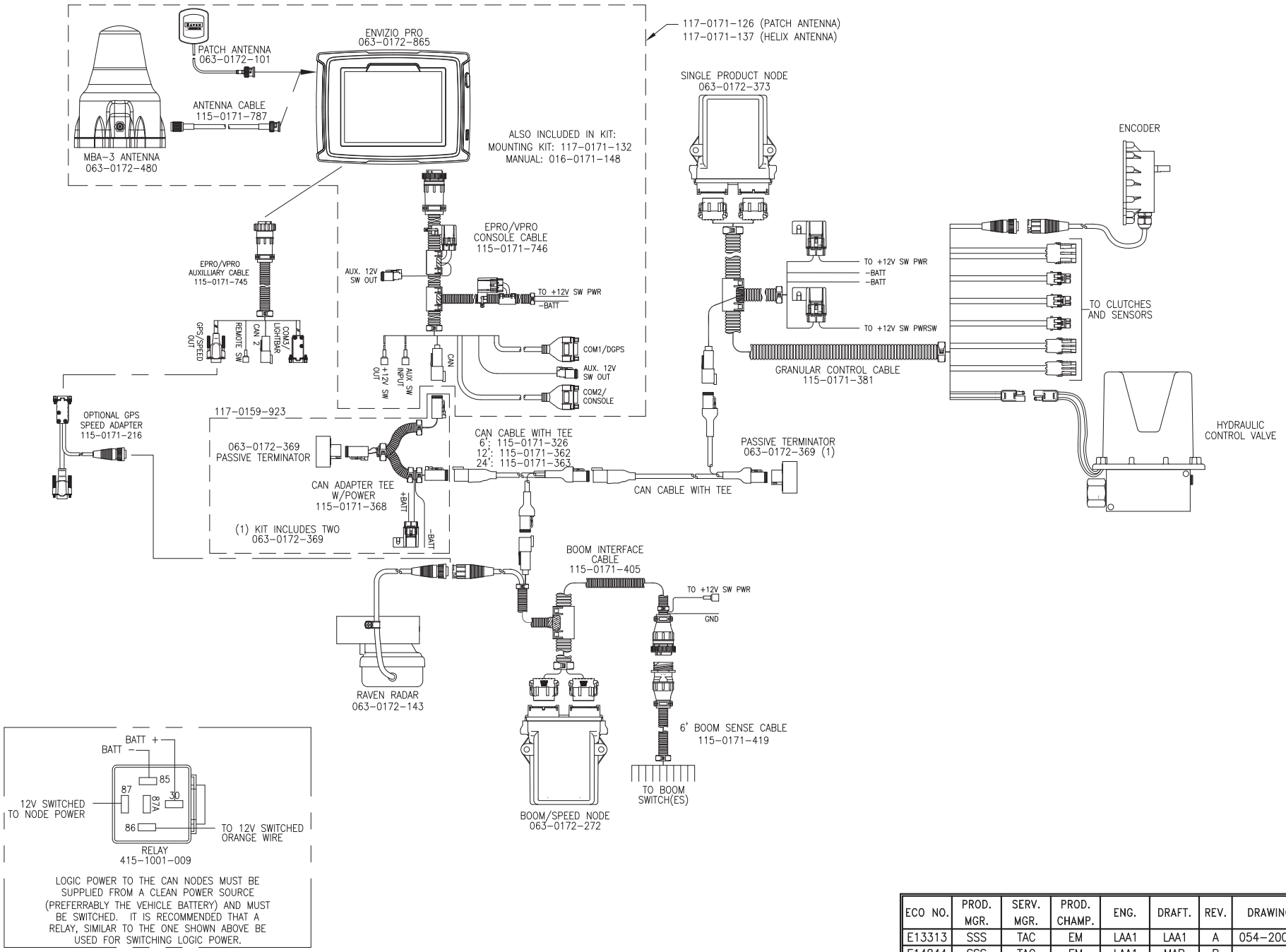
RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
4/25/11	E17491	JAB	AT	GLE	SSJ	BJH	A	054-2800-021
5/19/14	E23219	GLE	AT	JCS	NAP	JJP	B	054-2800-021

VIPER PRO WITH LIQUID CONTROL AND CAN ACCUBOOM



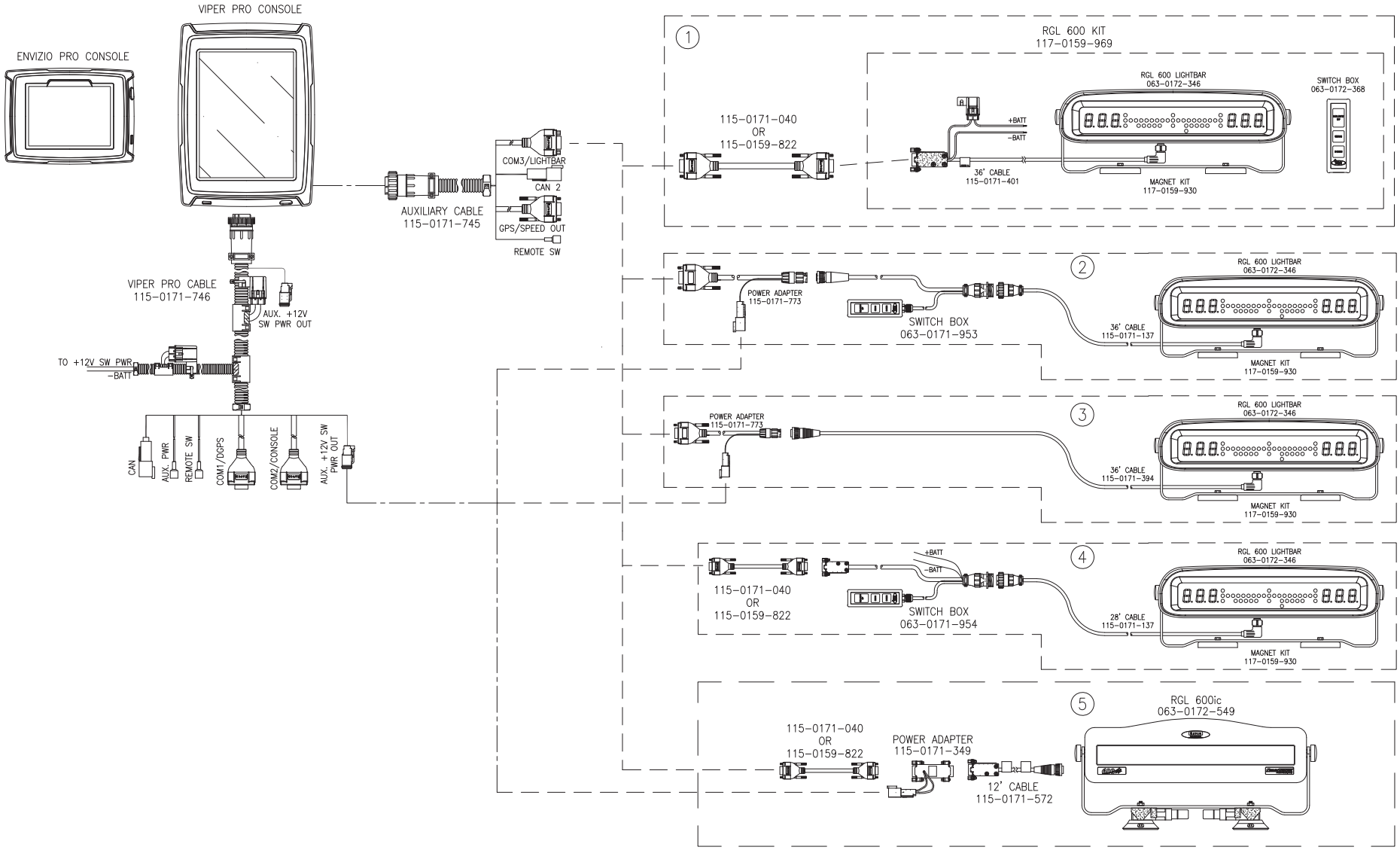
ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E13431	TPH	TAC	EM	JCP	LAA1	A	054-2130-003

ENVIZIO PRO WITH GPS AND GRANULAR PRODUCT CONTROL



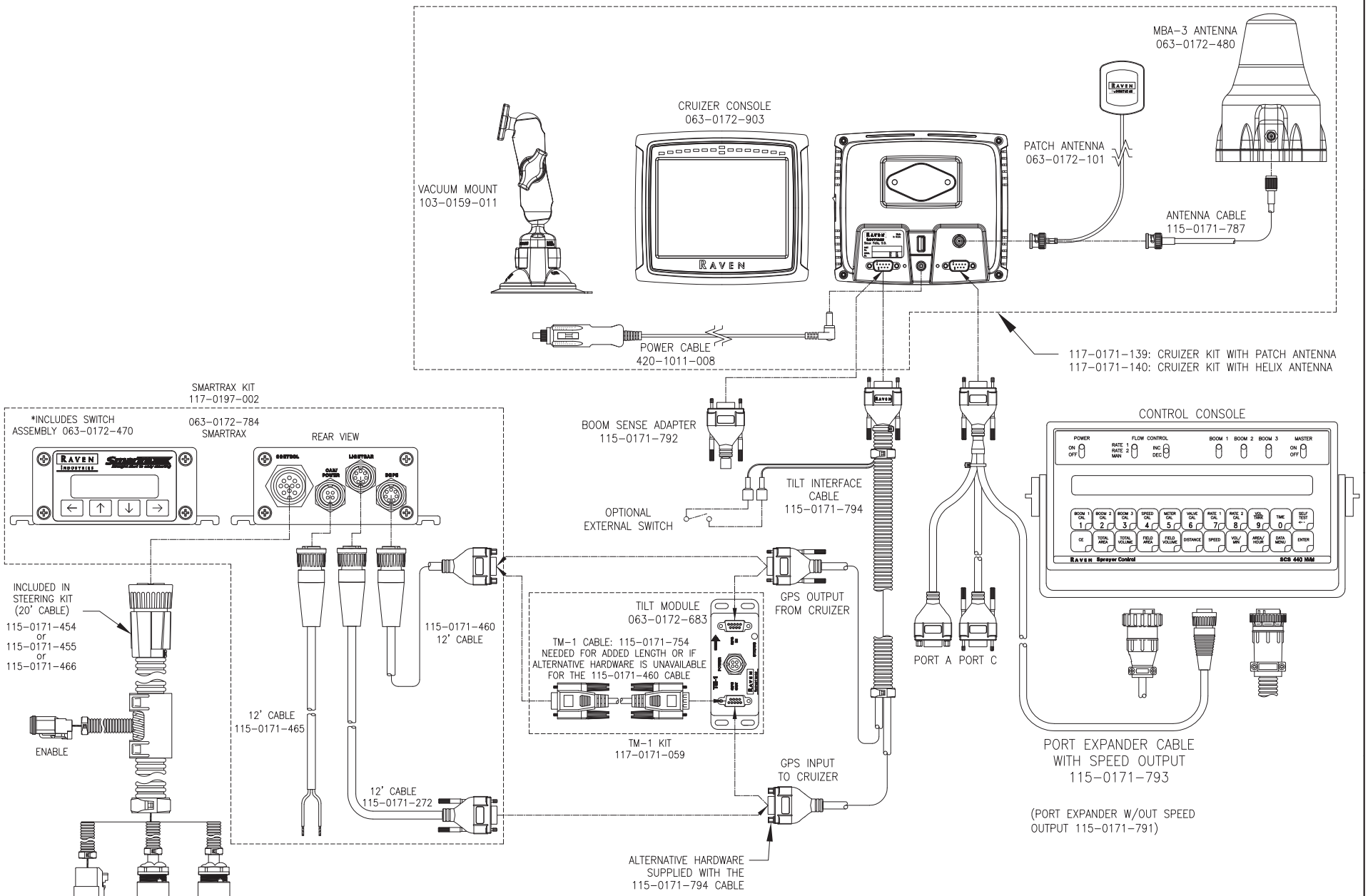
ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E13313	SSS	TAC	EM	LAA1	LAA1	A	054-2000-004
E14844	SSS	TAC	EM	LAA1	MAP	B	–

VIPER PRO/ENVIZIO PRO WITH RGL 600/600ic LIGHTBAR OPTIONS



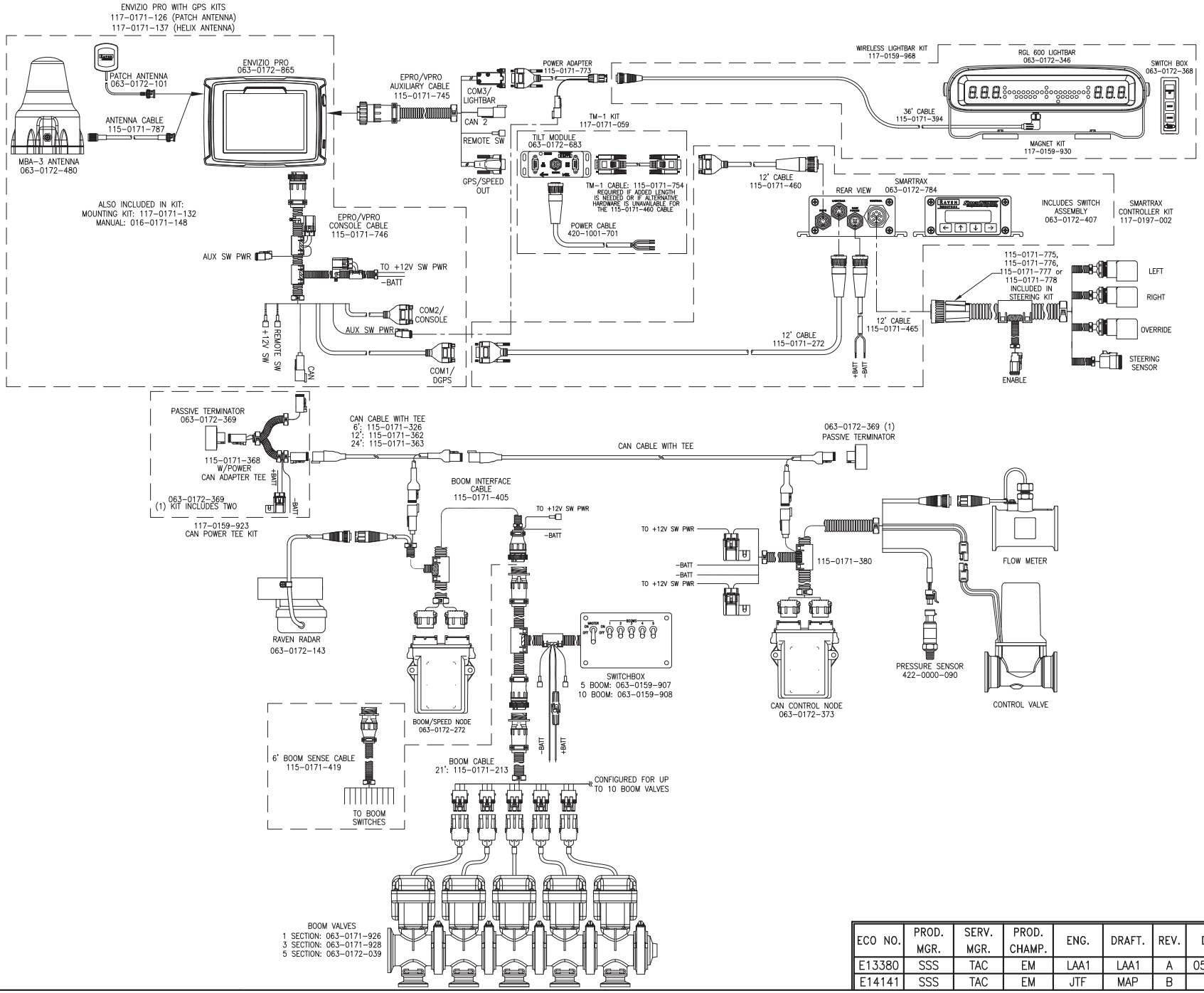
ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E15495	SSS	TAC	DCS	JCP	MAP	A	054-2110-002
E16058	SSS	TAC	DCS	JCP	MAP	B	–

CRUIZER SYSTEM DRAWING WITH KITS, CABLE OPTIONS, SMARTRAX, TM-1 AND SCS CONSOLE CONNECTION



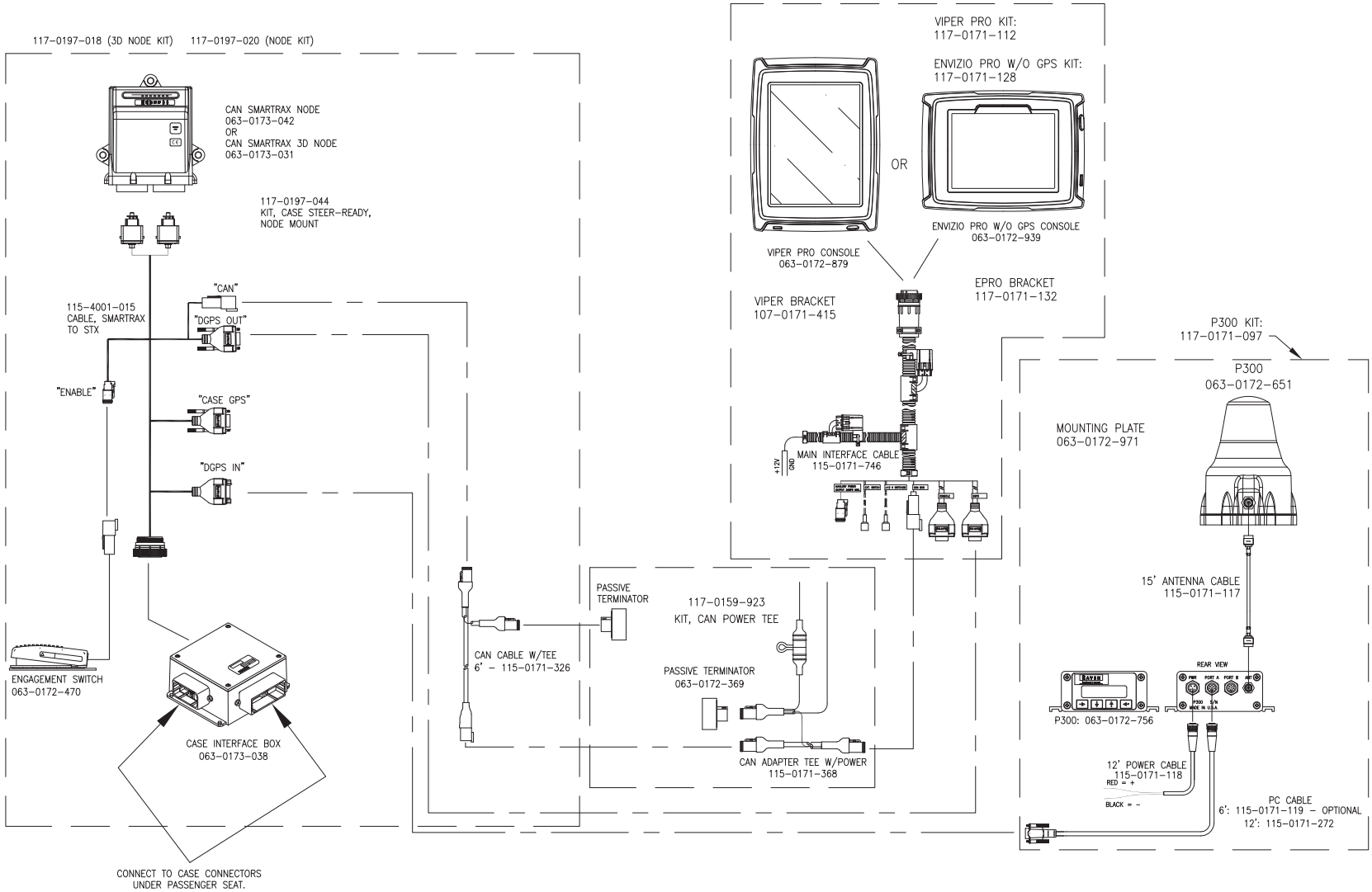
ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E13308	ADS2	TAC	DVS	LAA1	LAA1	A	054-2220-002

ENVIZIO PRO WITH GPS, LIQUID CONTROL, SMARTRAX, TM-1 AND EXTERNAL LIGHTBAR



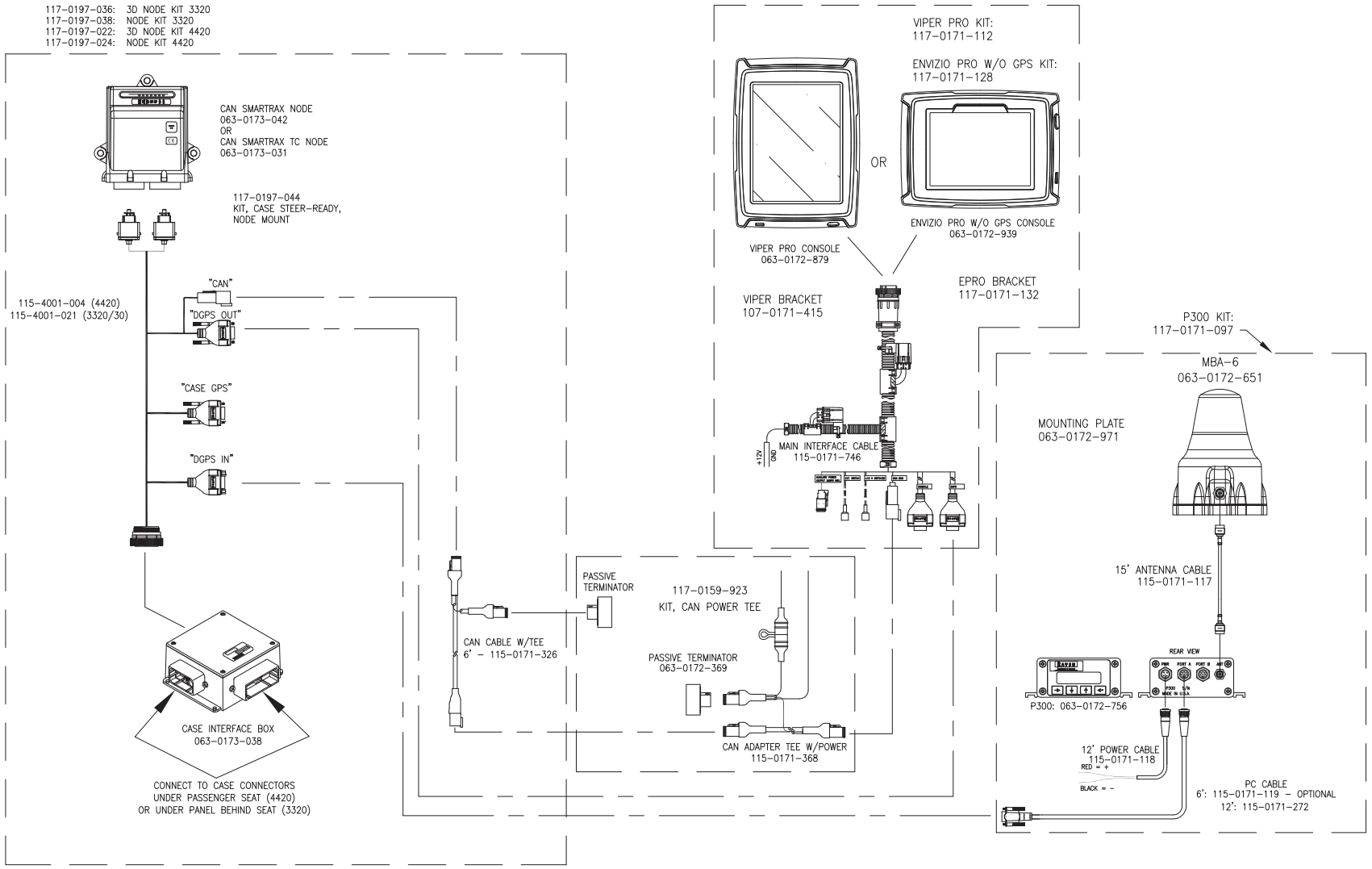
ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E13380	SSS	TAC	EM	LAA1	LAA1	A	054-2010-007
E14141	SSS	TAC	EM	JTF	MAP	B	–

ENVIZIO PRO/VIPER PRO CAN SMARTRAX STEIGER/QUADTRAC STEER-READY W/PHOENIX 300



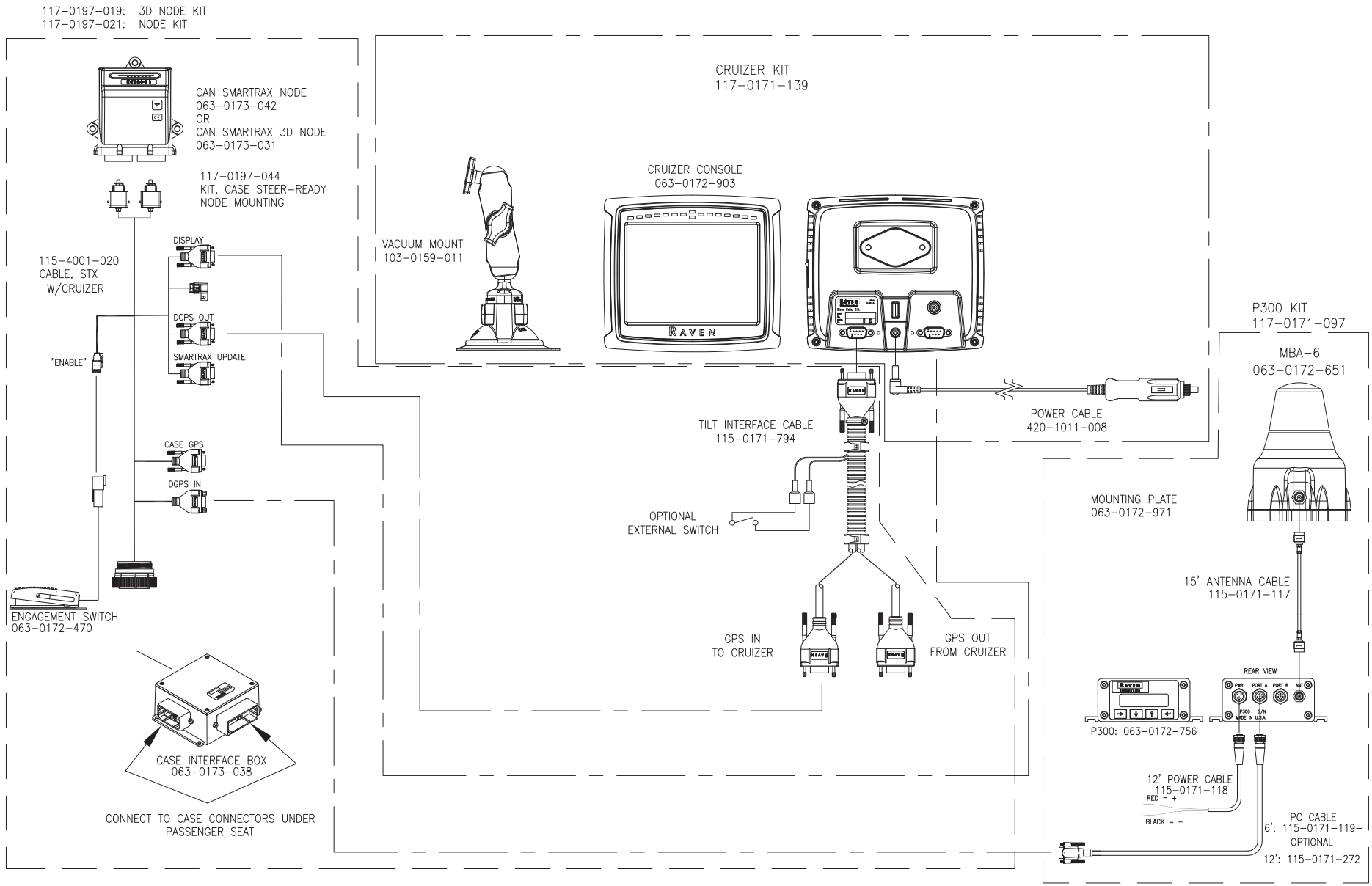
ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E14731	ADS2	TAC	SAL2	LBJ	MAP	A	054-3010-003

ENVIZIO PRO/VIPER PRO CAN SMARTRAX CASE SPRAYER STEER-READY W/PHOENIX 300



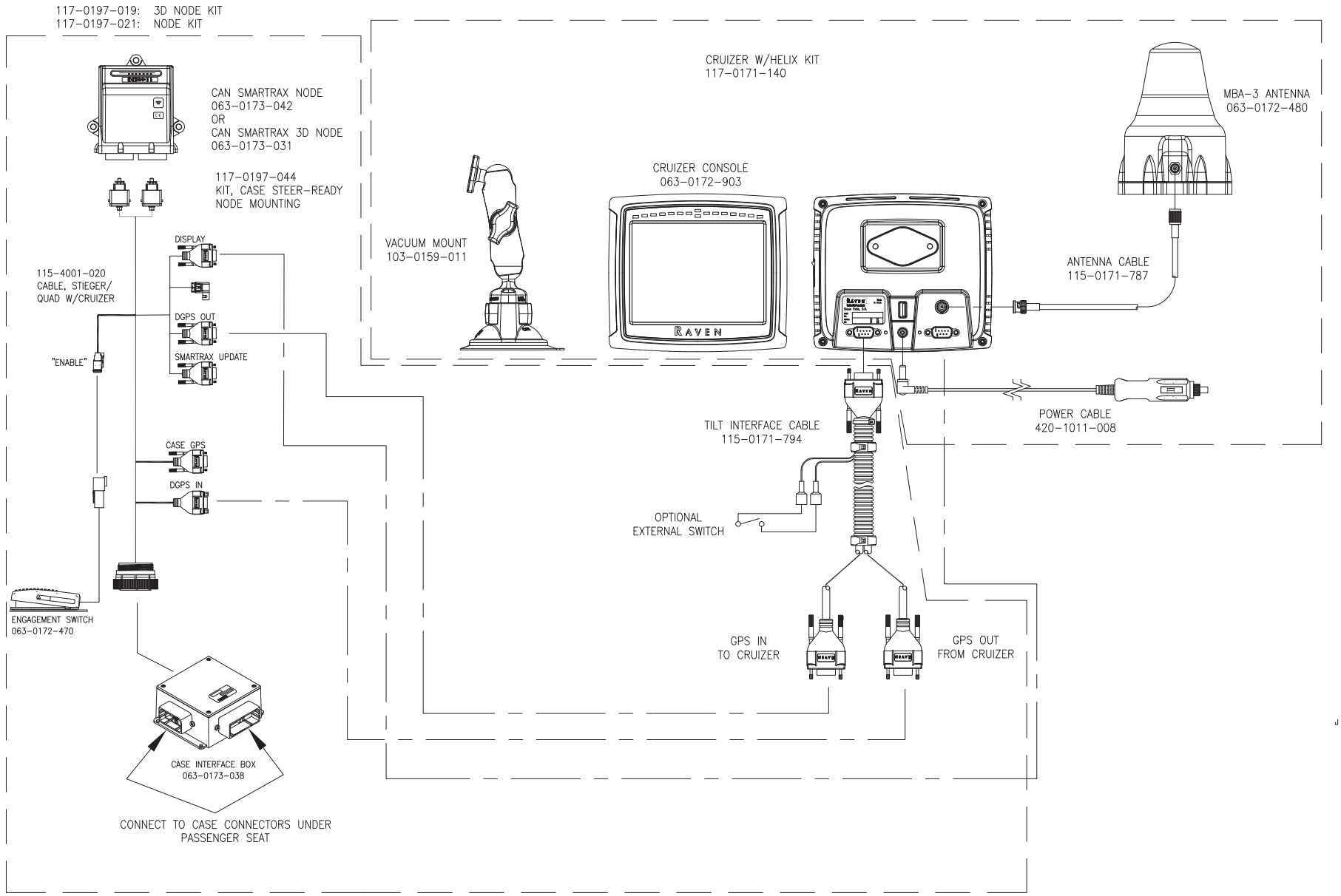
ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E14731	ADS2	TAC	SAL2	LBJ	MAP	A	054-3010-012

SMARTRAX NODE, P300, CRUIZER, STEIGER/QUADTRAC STEER-READY



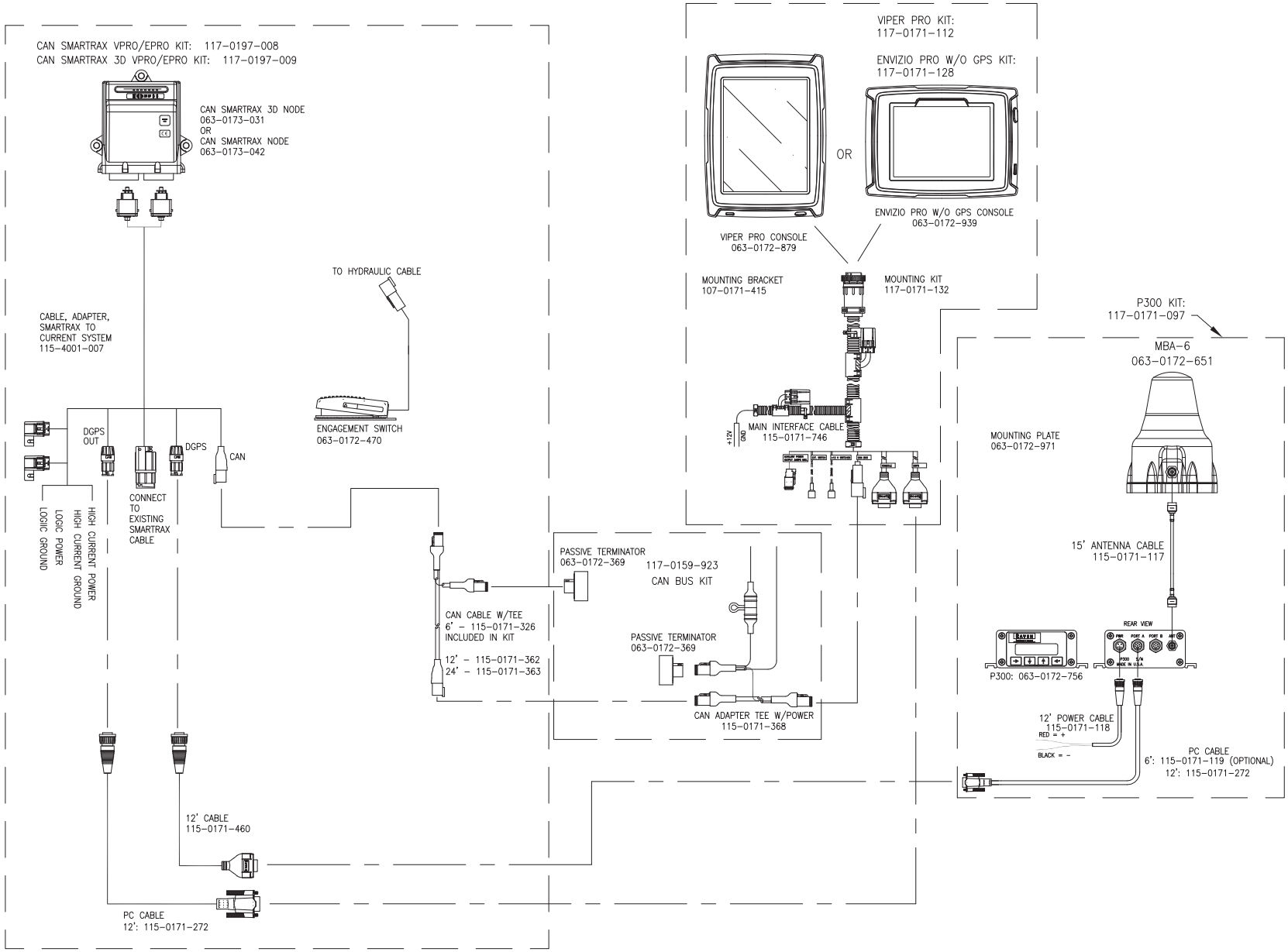
ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E14731	ADS2	TAC	SAL2	LBJ	MAP	A	054-3010-009

CRUIZER WITH HELIX ANTENNA, SMARTRAX NODE, STEIGER/QUADTRAC STEER-READY



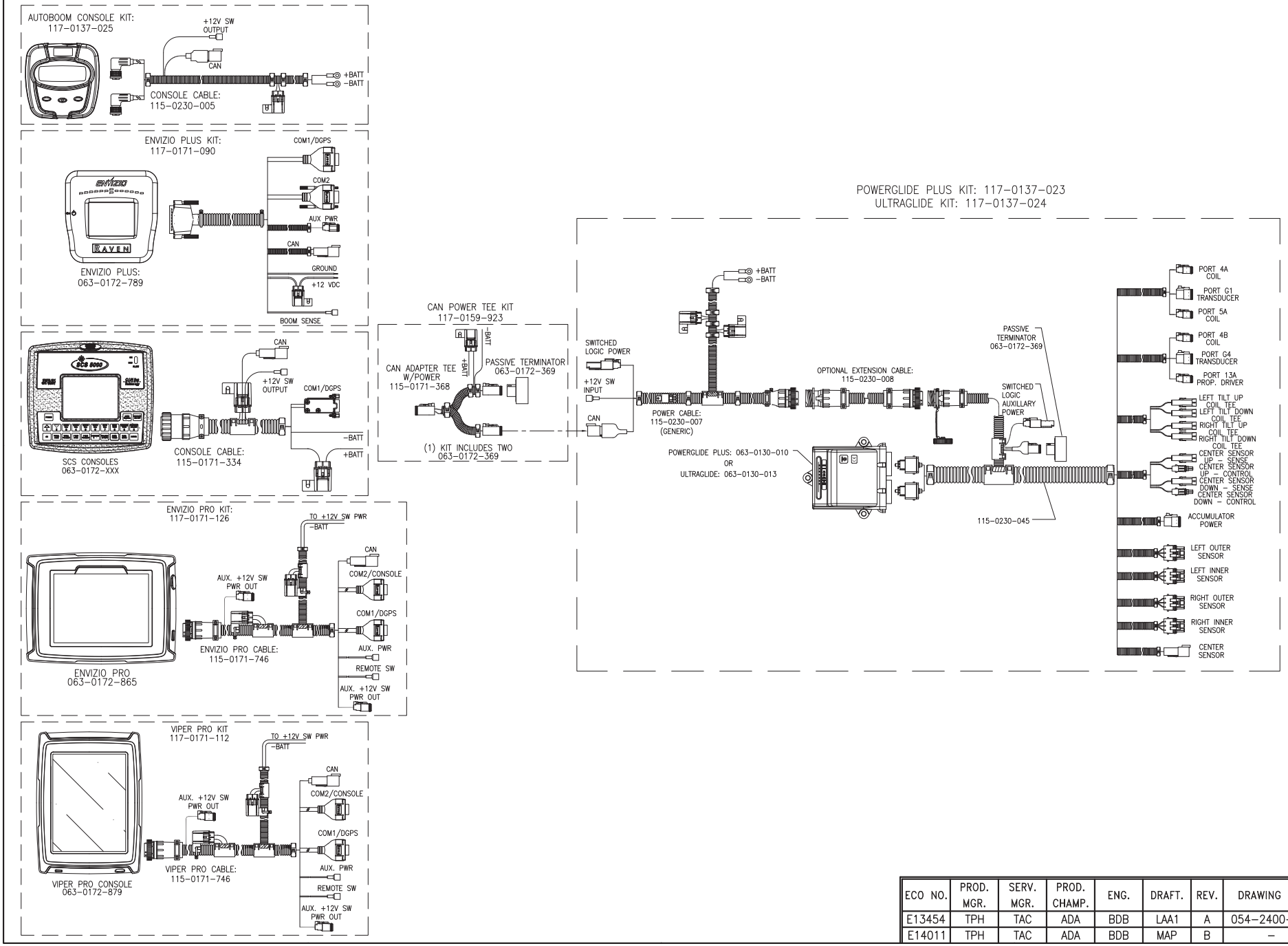
ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E14731	ADS2	TAC	SAL2	LBJ	MAP	A	054-3010-011

ENVIZIO PRO/VIPER PRO CAN SMARTRAX/SMARTRAX 3D W/PHONEIX 300



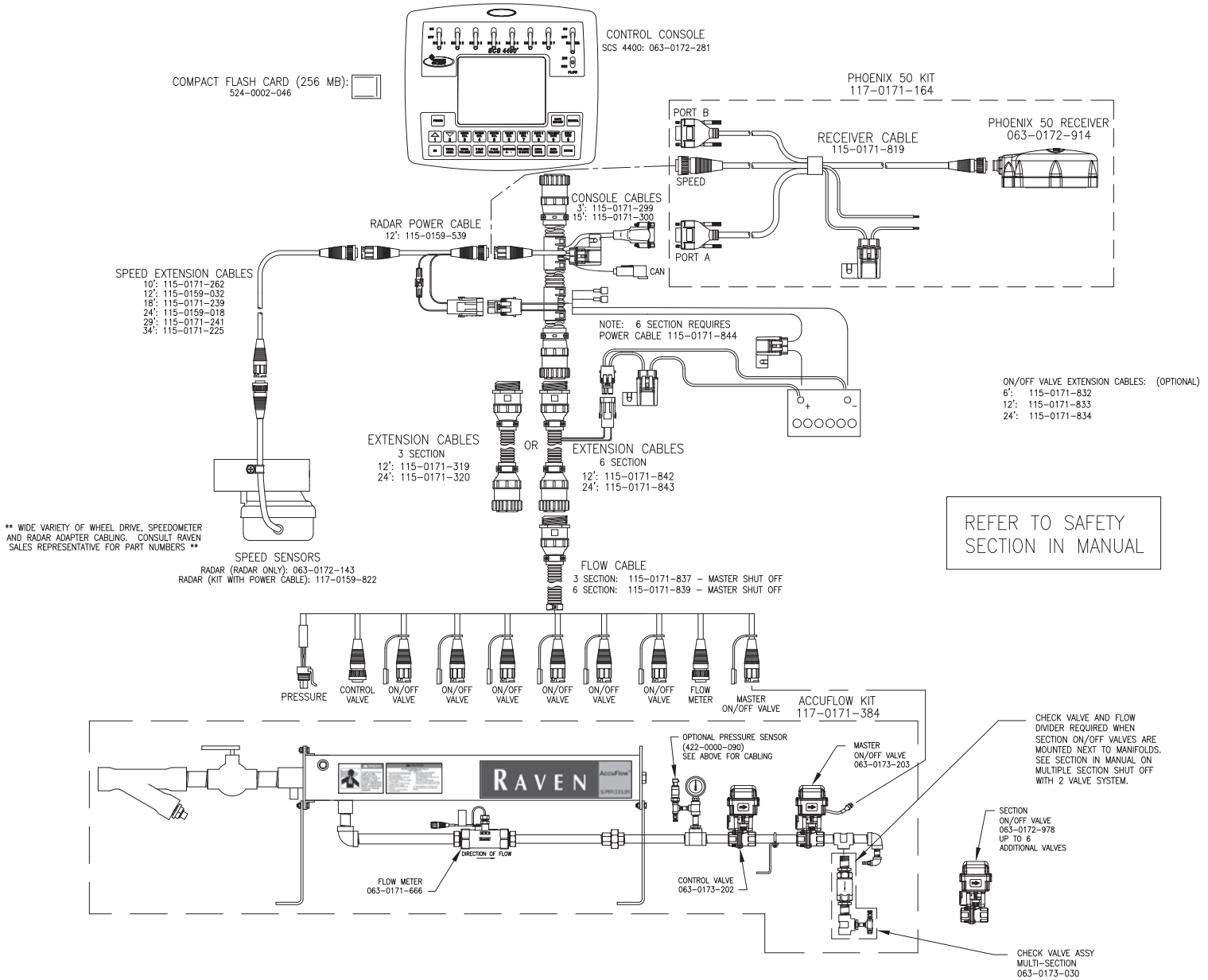
ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E14357	ADS2	TAC	SAL2	LBJ	MAP	A	054-3110-004

CAN POWERGLIDE PLUS AND ULTRAGLIDE SYSTEMS



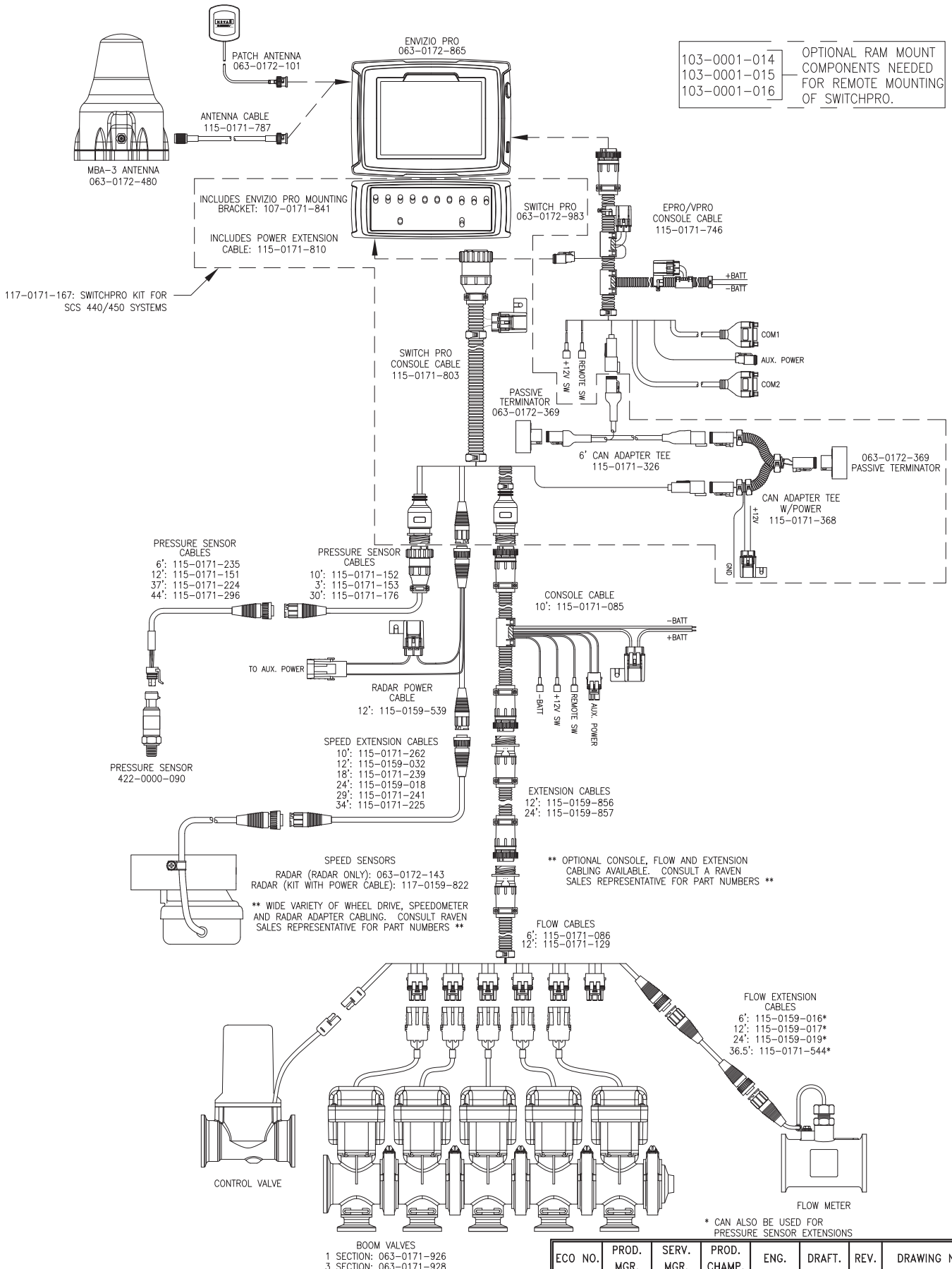
ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E13454	TPH	TAC	ADA	BDB	LAA1	A	054-2400-001
E14011	TPH	TAC	ADA	BDB	MAP	B	-

SCS 4400 WITH ACCUFLOW, 2 VALVE SYSTEM WITH MULTI SECTION BAR



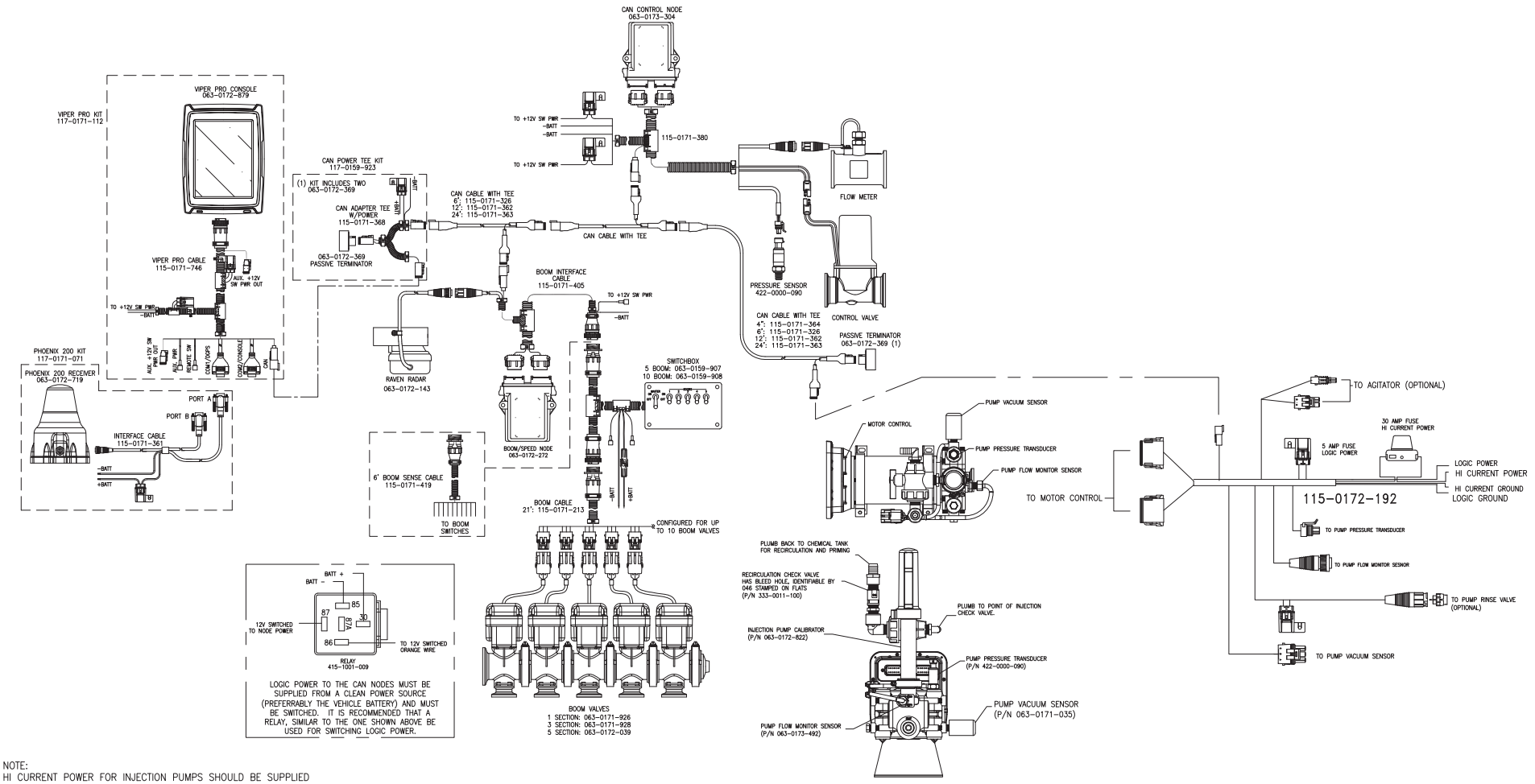
RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
4/25/11	E17491	JAB	TAC	GLE	SSJ	BJH	A	054-2840-013

ENVIZIO PRO WITH SWITCHPRO TO SCS 440/450 CABLED SYSTEMS



ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E14398	JAB	TAC	EJM	JTF	MAP	B	054-2040-001
E16257	JAB	AT	TJP	NAP	MAP	C	–

VIPER PRO WITH GPS, LIQUID PRODUCT CONTROL AND CAN INJECTION

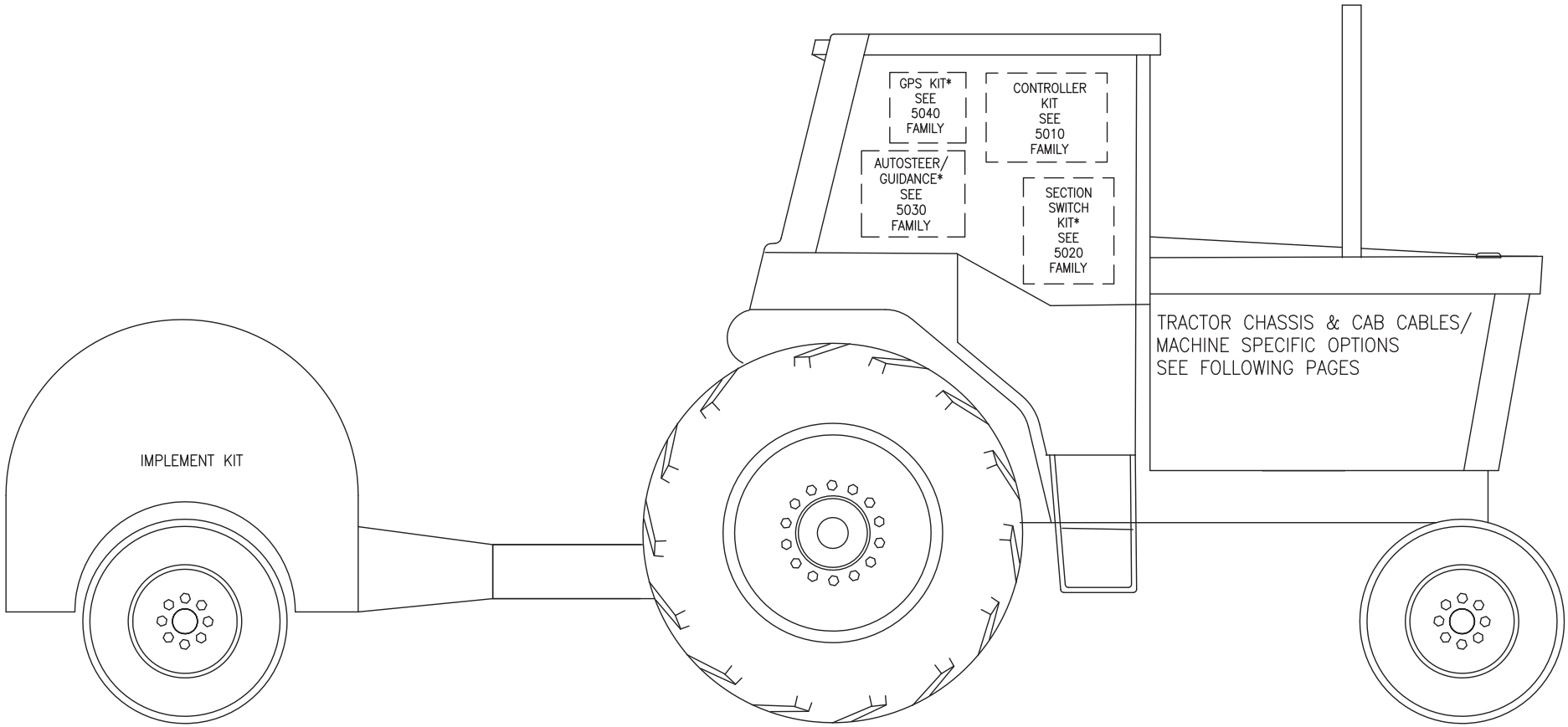


NOTE:
HI CURRENT POWER FOR INJECTION PUMPS SHOULD BE SUPPLIED THRU A HI CURRENT RELAY DIRECT TO BATTERY. USE KEY SWITCH TO CONTROL THIS RELAY.
RELAY AVAILABLE:
415-1001-009 = 40 AMP
063-0159-929 = 100 AMP

NOTE:
HI VOLUME PUMP = 30 AMP MAX
LOW VOLUME PUMP = 10 AMP MAX

RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
8/10/12	E20017	JAB	AT	GLE	NAP	JJP	B	054-2140-007
5/19/14	E23219	GLE	AT	JCS	NAP	JJP	C	054-2140-007

RAVEN CANBUS ELECTRICAL HARDWARE FOR TRACTORS

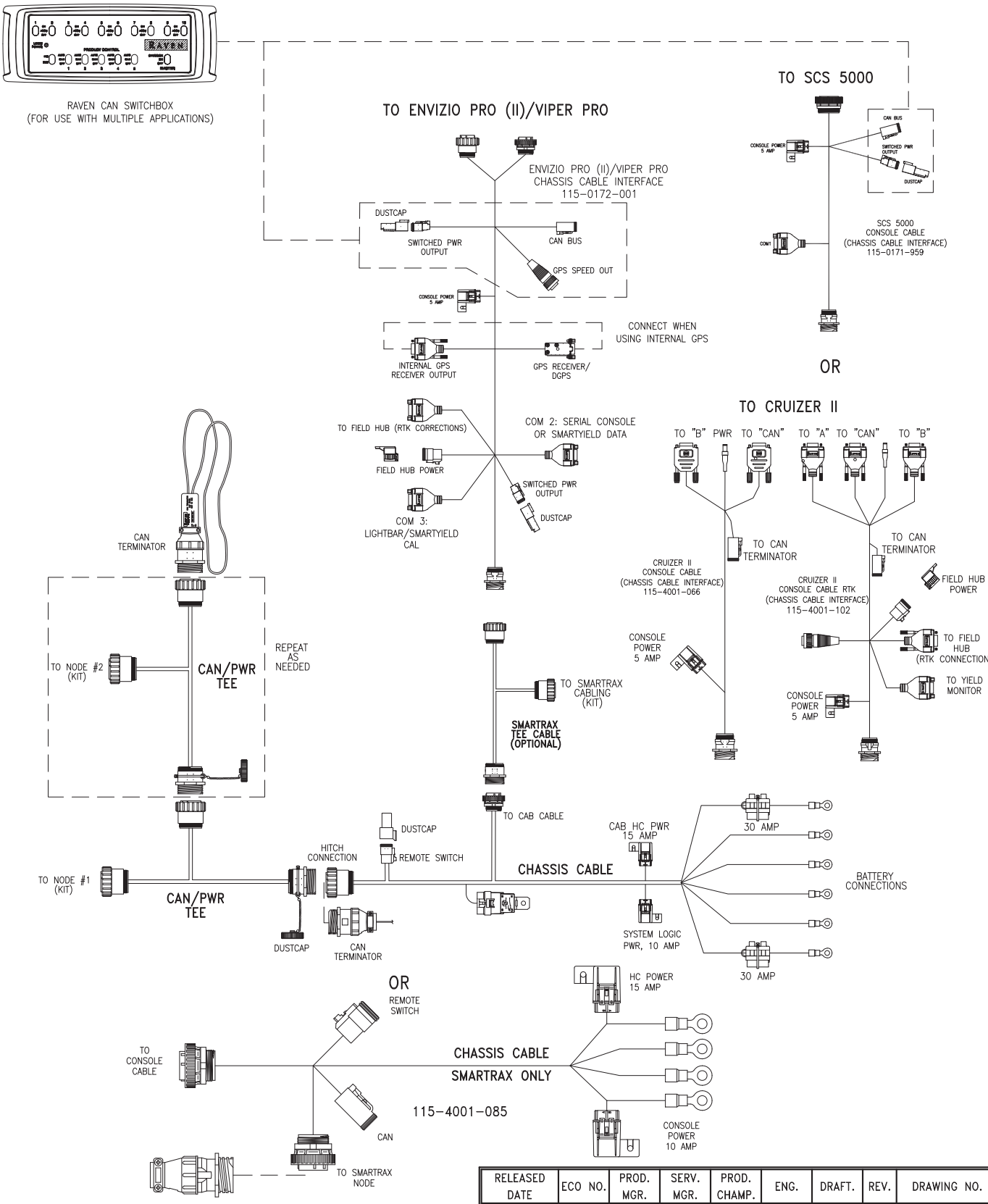

GPS KIT* SEE 5040 FAMILY
CONTROLLER KIT SEE 5010 FAMILY
AUTOSTEER/ GUIDANCE* SEE 5030 FAMILY
SECTION SWITCH KIT* SEE 5020 FAMILY
TRACTOR CHASSIS & CAB CABLES/ MACHINE SPECIFIC OPTIONS SEE FOLLOWING PAGES
IMPLEMENT KIT

* IF APPLICABLE

1) PLANTER KIT – SEE 3XXX FAMILY
2) SPRAYER/SPREADER KIT – SEE 5100 FAMILY
3) NH3 TOOLBAR KIT – SEE 5300 FAMILY

RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
5/26/11	E17536	JAB	TAC	TLH	CRS	AJK2	B	054–5000–001
5/10/12	E18877	DSP	AT	CAF	CRS	JJP	C	054–5000–001

GEN II SYSTEM CABLING CONNECTIONS



RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
5/26/11	E17526	JAB	TAC	TLH	CRS	AJK2	B	054-5000-001
5/10/12	E18877	DSP	AT	CAF	CRS	JJP	C	054-5000-001

TRACTOR/MACHINE/IMPLEMENT SPECIFIC CABLES AND ACCESSORIES

Select One (1) Chassis Cable:

115-0171-915 Cable, Power/CAN, Chassis, Tractors with Front Mounted Batteries
Approved Tractor Models: CAT Challenger-MT 700, 800, 900; JD 6x20, 6x30, 7220, 7320, 7420, 7520, 7230, 7330, 7430, 7530 (Small Frame 7x20 and 7x30 Series JD)
115-0171-936 Cable, Power/CAN, Chassis, Generic 4WD Tractors
Approved Tractor Models: JD 4WD; Case IH 4WD; New Holland 4WD; Buhler 4WD
115-0171-937 Cable, Power/CAN, Chassis, Row Crop Tractors
Approved Tractor Models: Case IH Row Crop Tractors, CAT Challenger MT500, 600; JD 7x00, 7x10; New Holland Row Crop
115-0171-938 Cable, Power/CAN, Chassis, Large Frame JD and Buhler Row Crop Tractors
Approved Tractor Models: JD 8x00, 8x10, 8x20, 8x30, 7620, 7720, 7820, 7920, 7630, 7730, 7830, 7930; Buhler Row Crop Tractors
115-4001-085 Cable, Power/CAN, Chassis, Steering Only Systems
115-0172-046 Cable, Power/CAN, Chassis, Small Tractors

Optional:
115-0171-929 Cable, 10' Extension, Cab Cable to Chassis Cable
117-0171-298 Kit, Magnetic Mount, Proximity Remote Swtich

Select One (1) Field Computer/Console Cable:

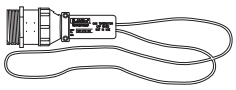
115-0172-001 Envizio Pro (II)/Viper Pro Console Cable, Chassis Cable Interface, Gen II RTK
115-0172-047 VPro/EPro Console Cable, Gen II, Small Tractors
115-0171-959 SCS 5000 Console Cable, Chassis Cable Interface, Gen II
115-4001-066 Cruizer II Console Cable, Chassis Cable Interface, Gen II
115-4001-102 Cruizer II Console Cable, Chassis Cable Interface, Gen II RTK
115-0171-995 SCS 4070 Console Cable, Chassis Cable Interface, Gen II
115-0172-003 SCS 4400 Console Cable, Liquid Product, Gen II (includes chassis cabling)

Select One (1) CAN/Power Tee Extension Cable for Each Node (excluding SmarTrax and OmniRow Planter nodes)

115-0171-928 Cable, CAN/Power Implement Tee, 12" Lg
115-0171-951 Cable, CAN/Power Implement Extension Tee, 6' Lg
115-0171-916 Cable, CAN/Power Implement Extension Tee, 12' Lg
115-0171-917 Cable, CAN/Power Implement Extension Tee, 24' Lg
115-0171-934 Cable, CAN/Power Implement Extension Tee, 36' Lg
*Optional Extensions Available; Reference DWG 054-3001-016

Select One (1) CAN TERMINATOR per implement (already included in OmniRow Planter, Product Controller, & AccuFlow System kits)

063-0173-224 Terminator, CAN Passive, 16 Pin AMP



Select One (1) In-Cab CAN terminator (already included in OmniRow Planter System, Steering Only Chassis Cables, and Boom Sense/Speed/CAN SwitchBox Kits)

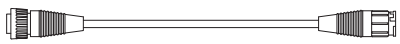
063-0172-369 Terminator, CAN Passive

Select One (1) SmarTrax Tee Interface Cable (if applicable, not required with Steering Only Chassis Cables)

115-4001-070 Cable, 6" Tee, SmarTrax to Cab Cable
115-4001-071 Cable, 72" Tee, SmarTrax to Cab Cable

Select One (1) Speed Sensor Extension Cable (if applicable)

115-0171-262 10' 115-0159-018 24'
115-0159-032 12' 115-0171-241 29'
115-0171-239 18' 115-0171-225 34'

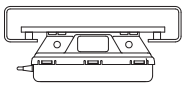


RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
5/26/11	E17526	JAB	TAC	TLH	CRS	AJK2	B	054-5000-001
5/10/12	E18877	DSP	AT	CAF	CRS	JJP	C	054-5000-001

TRACTOR/MACHINE/IMPLEMENT SPECIFIC CABLES AND ACCESSORIES

Radar (if applicable)

063-0172-143

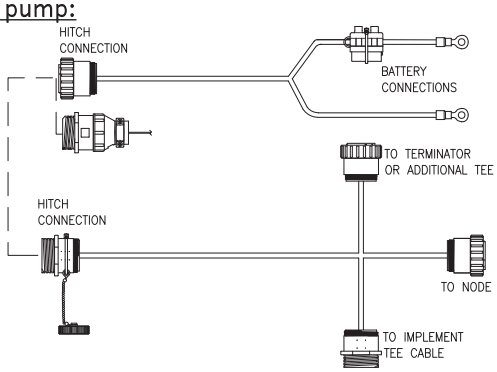


NOTE: Various adapter cables to alternate speed sensors/radars are available. (Refer to DWG. 054-5000-002)

For Sprayers operating MORE than two High Volume Injection Pumps at the same time, select One (1) Power Cable and One (1) Injection Pump Add On Cable for EACH additional pump:

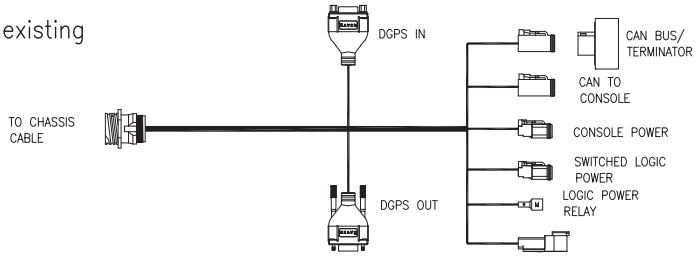
115-0171-953 Cable, Power, Chassis, 3rd or 4th Injection Pump Add On

115-0171-954 Cable, Node, 6', 3rd or 4th Injection Pump Add On
115-0171-955 Cable, Node, 12', 3rd or 4th Injection Pump Add On
115-0171-956 Cable, Node, 24', 3rd or 4th Injection Pump Add On
115-0171-957 Cable, Node, 36', 3rd or 4th Injection Pump Add On

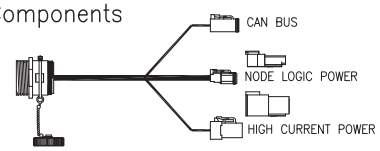


For systems already equipped with Console or Field Computer cabling, purchase vehicle cab retrofit cable:

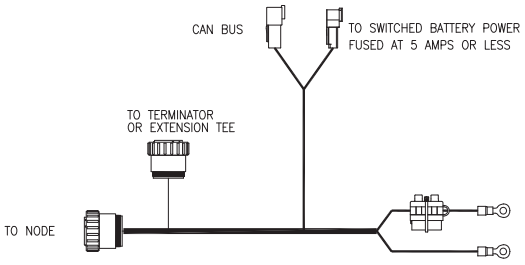
115-0171-927 Cable, Cab, Pwr/CAN, Retrofit to existing Console/Field Computer



115-0172-041 Cable, Adapter, Gen II Cabling to Gen I Components



115-0172-052 Cable, Adapter, Gen I Cabling to Gen II Components (30 amp max)

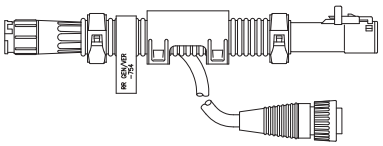


RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
5/26/11	E17526	JAB	TAC	TLH	CRS	AJK2	B	054-5000-001
5/10/12	E18877	DSP	AT	CAF	CRS	JJP	C	054-5000-001

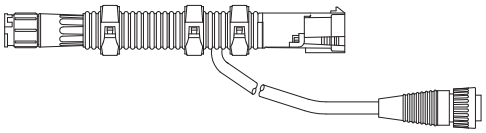
SPEED SENSOR ADAPTER CABLES

Raven Radar to Third Party Adapter:

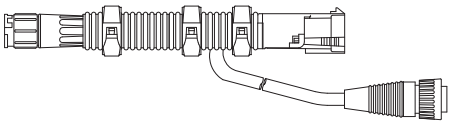
115–0159–754 – Ford Gen/Vers/New Holland Tractors



115–0159–550 – John Deere Tractors

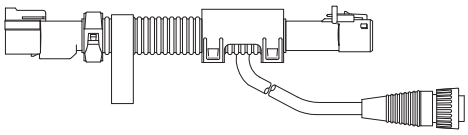


115–0159–551 – CaseIH Tractors

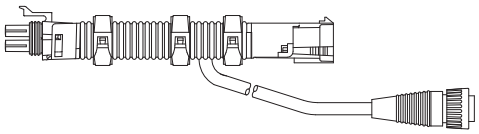


Third Party Radar to Raven Speed Sensor Interface Cable:

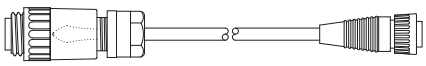
115–0159–709 – Ford Gen/Vers/New Holland



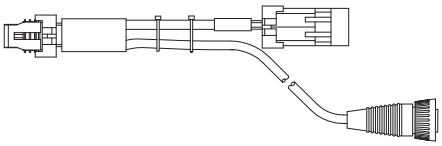
115–0159–519 – John Deere w/Magnavox Radar



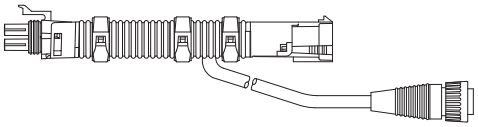
115–0171–670 – John Deere 30 Series



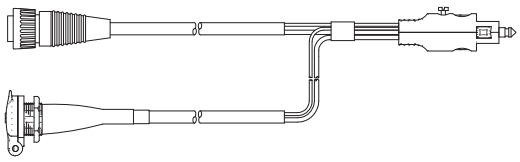
115–0159–700 – John Deere 7000/8000/9000 Series



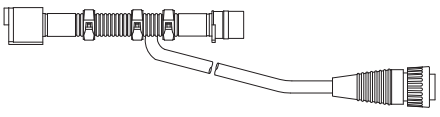
115–0159–517 – CaseIH and New Holland TG



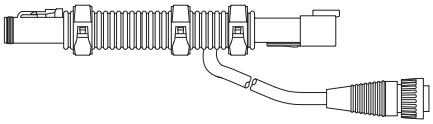
115–0171–304 – Case MX or STX Vehicles



115–0159–518 – CAT Challenger Models 65 & 75



115–0159–627 – CAT Challenger 65C, 75C, 65D, 75D, 5D, & Row Crop 35, 45, & 55

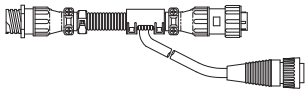


RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16721	JAB	AT	GLE	CRS	MAP	A	054–5000–002
5/10/12	E18877	JAB	AT	CAF	CRS	JJP	B	054–5000–002

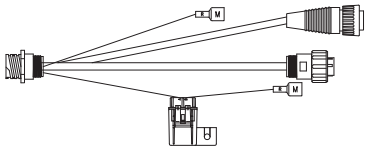
SPEED SENSOR ADAPTER CABLES

115–0159–580 – CAT Vehicles Adaptor
(Console with Rev "E" or later)

115–0159–529 – Ford/White/AGCO Allison/Dickey John



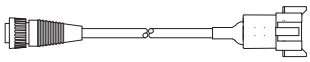
115–0159–526 – Dickey John with External Power



115–0159–580 – Dickey John Adapter

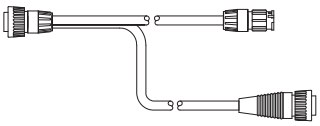
115–0159–432 – CaseIH w/TRW Radar Adapter

115–0171–228 – CaseIH Maxim 110–170 Adapter

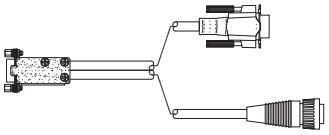


Raven GPS Speed Adapter Cables:

115–0171–166 – Cable, Speed Adapter, 210/310/400C/410/P300



115–0171–216 – Cable, Speed Adapter, 110/115/P200/Envizio Pro



Raven Control and On/Off Valve Adapter Cables:

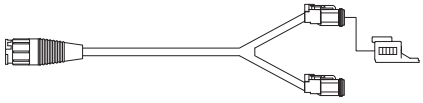
115–0171–807 – Cable, Adapter, Control Valve, NH3

115–0171–808 – Cable, Adapter, ON/OFF Valve NH3

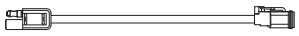
115–0171–856 – Cable, Adapter, Old Style NH3 ON/OFF Valve to 4 Pin Conxall Cable

115–0171–857 – Old Style NH3 Control Valve to 4 Pin Conxall Cable

115–0172–055 – Cable, Adpater, Fast Valve to PWM Valve



115–3001–104 – Cable, Adapter, Standard Valve to Planter PWM Valve



RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16721	JAB	AT	GLE	CRS	MAP	A	054–5000–002
5/10/12	E18877	JAB	AT	CAF	CRS	JJP	B	054–5000–002

TRACTOR/MACHINE/IMPLEMENT SPECIFIC CABLES AND ACCESSORIES WITH DIMENSIONS

Select One (1) Chassis Cable:

115-0171-915 Cable, Power/CAN, Chassis, Tractors with Front Mounted Batteries Approved Tractor Models: CAT Challenger-MT 700, 800, 900; JD 6x20, 6x30, 7220, 7320, 7420, 7520, 7230, 7330, 7430, 7530 (Small Frame 7x20 and 7x30 Series JD)

115-0171-936 Cable, Power/CAN, Chassis, Generic 4WD Tractors Approved Tractor Models: JD 4WD; Case IH 4WD; New Holland 4WD; Buhler 4WD

115-0171-937 Cable, Power/CAN, Chassis, Row Crop Tractors Approved Tractor Models: Case IH Row Crop Tractors, CAT Challenger MT500, 600; JD 7x00, 7x10; Holland Row Crop

115-0171-938 Cable, Power/CAN, Chassis, Large Frame JD and Buhler Row Crop Tractors Approved Tractor Models: JD 8x00, 8x10, 8x20, 8x30, 7620, 7720, 7820, 7920, 7630, 7730, 7830, 7930; Buhler Row Crop Tractors

115-4001-085 Cable, Power/CAN, Chassis, Steering Only Systems

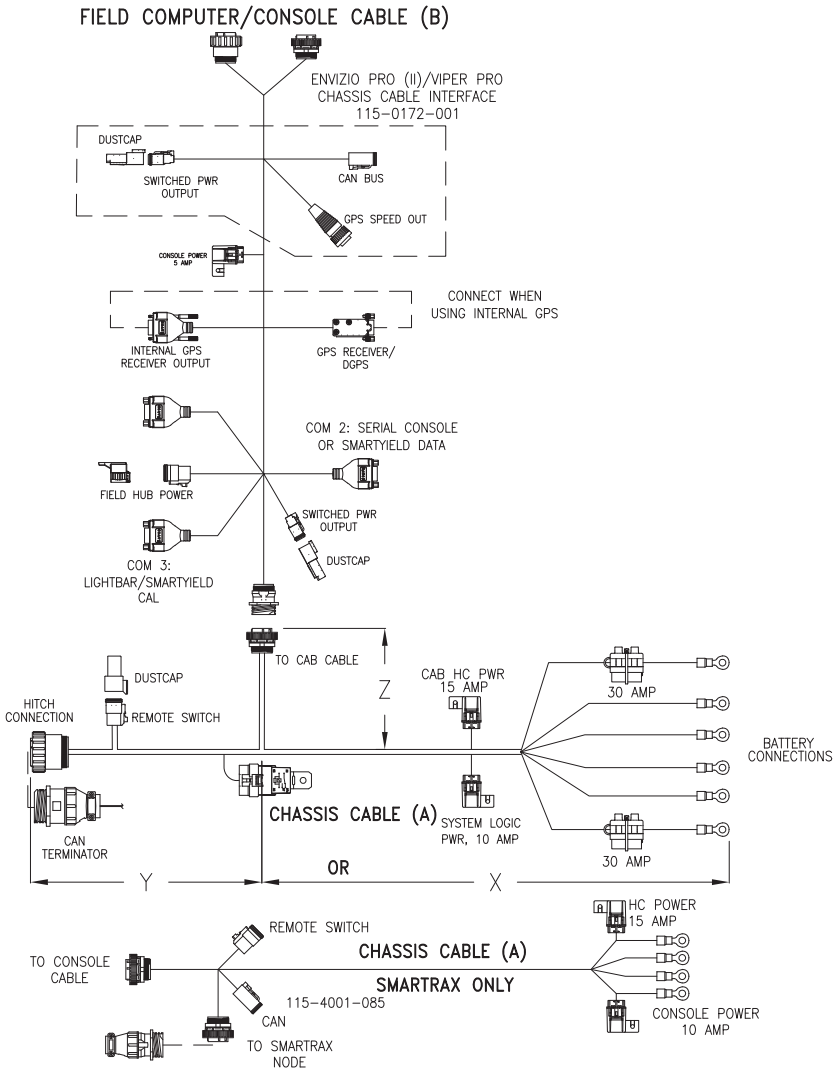
115-0172-046 Cable, Power/CAN, Chassis, Small Tractors

Select One (1) Field Computer/Console Cable:

115-0172-001 Envizio Pro (II)/Viper Pro Console Cable, Chassis Cable Interface, Gen II RTK

115-0172-047 VPro/EPro Console Cable, Gen II, Small Tractors

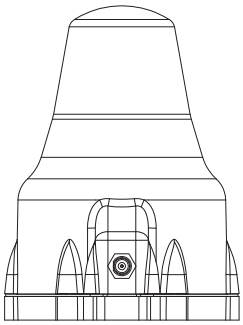
GEN II SYSTEM CABLING CONNECTIONS



	Chassis cable #	Dimension X Battery to console connection	Dimension Y Console to hitch connection	Dimension Z Console connection on Chassis harness to console connector
A	115-0171-915	261"	71"	48"
	115-0171-936	119"	144"	78"
	115-0171-937	84"	72"	84"
	115-0171-938	96"	48"	48"
	115-0172-046	108"	48"	24"
			"T" to SmarTrax connection	
	115-4001-085	198"	6"	6"
	Console Cable		**Field Computer to Chassis Cable**	
B	115-0172-001		97"	
	115-0172-047		48"	

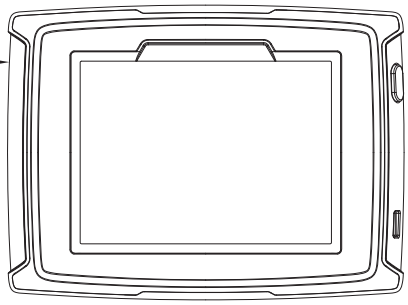
RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
3/22/13	E20584	GLE	AT	BG	CRS	AJK2	A	054-5000-003

ENVIZIO PRO II WITH GPS (MBA-6 ANTENNA)
KIT P/N 117-5010-001W, 117-5010-001K, OR 117-5010-001KG*



MBA-6 ANTENNA*
063-0172-651

ANTENNA CABLE*
115-0171-787

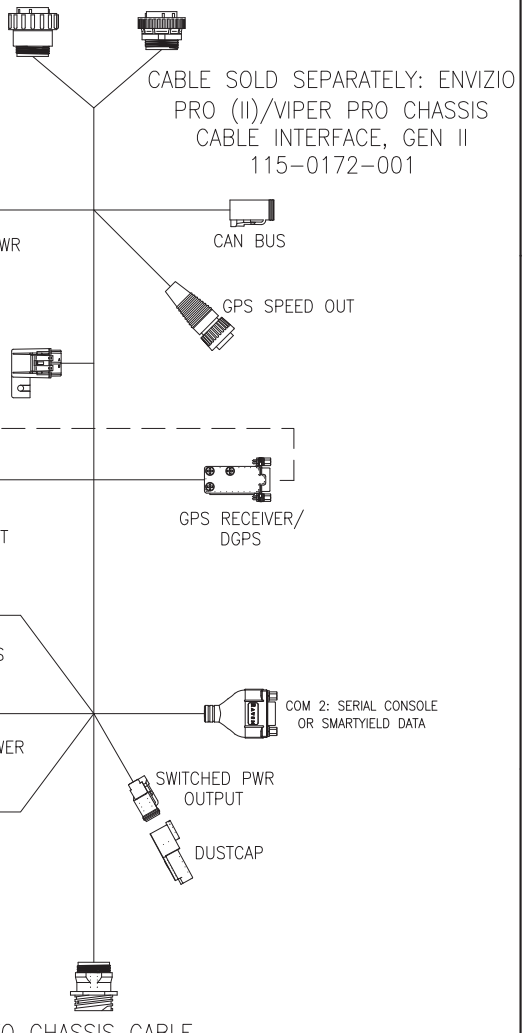


ENVIZIO PRO II
063-0173-258

MOUNTING PLATE*
063-0172-971

*ALSO INCLUDED IN KIT:
MOUNTING KIT: 117-0171-132
MANUAL: 016-0171-148
QRG: 016-0171-149

*SUFFIX INDICATES INCLUDED OPTIONS:
K - RTK AUTHORIZATION CODE, OEMV2 - 077-0180-062
G - GLONASS AUTHORIZATION CODE, OEMV2 - 077-0180-064
W - WAAS/SBAS
L - LESS ANTENNA/CABLE/PLATE AND MOUNTING KIT



PURCHASE SEPARATELY:
E-PRO SINGLE PRODUCT VRA AUTHORIZATION CODE:
077-0180-031

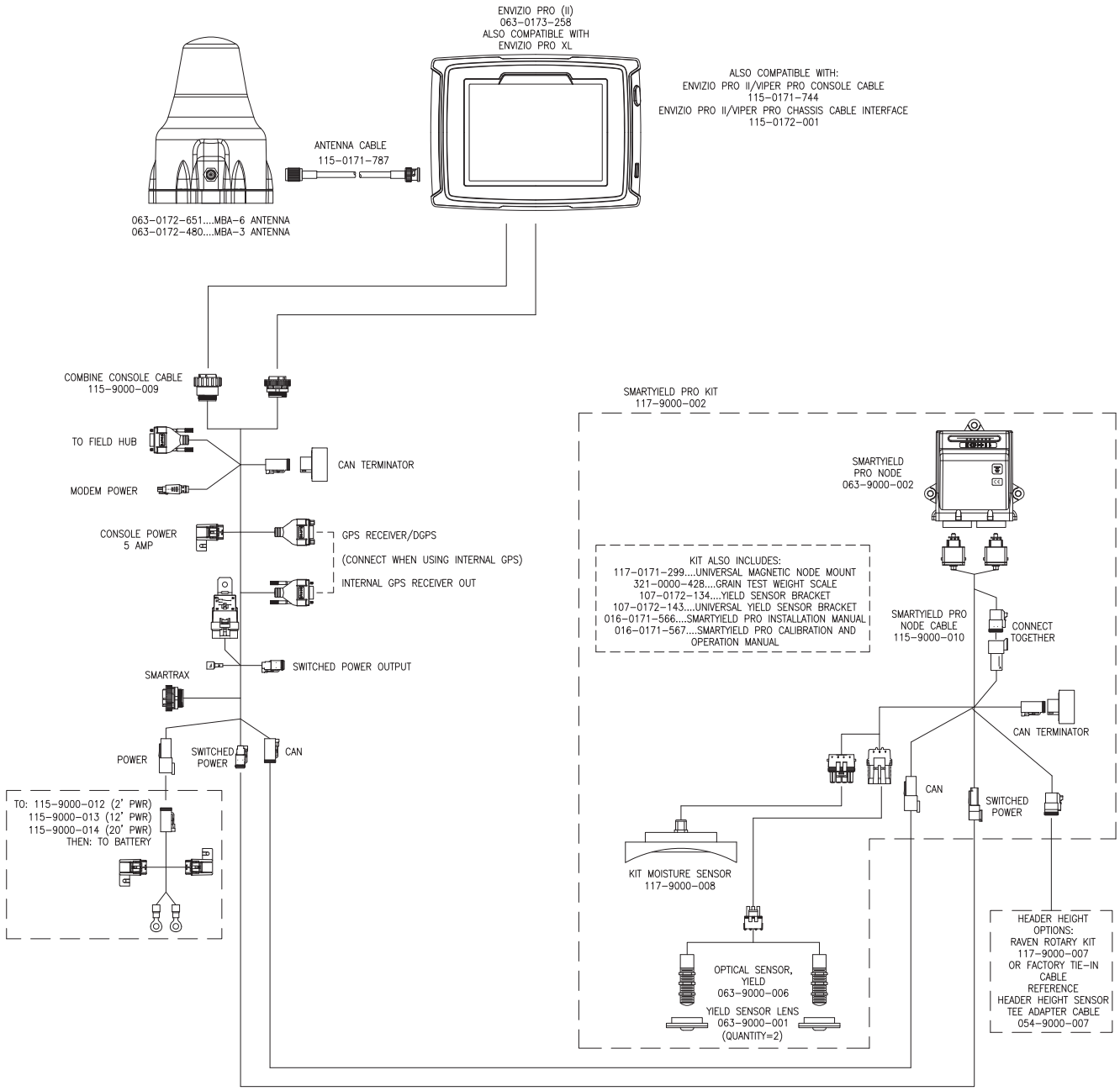
E-PRO MULTI PRODUCT CONTROL (3 & 4) AUTHORIZATION CODE:
077-0180-067

E-PRO MULTI PRODUCT VRA AUTHORIZATION CODE:
077-0180-066

NOTE:
REFER TO DWG. 054-5000-001 FOR OTHER SYSTEM COMPONENTS

RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
11/3/10	E16795	SSS	TAC	DCS	DAS	MAP	B	054-5010-001
5/26/11	E17536	SSS	TAC	SAL2	DAS	AJK2	C	-

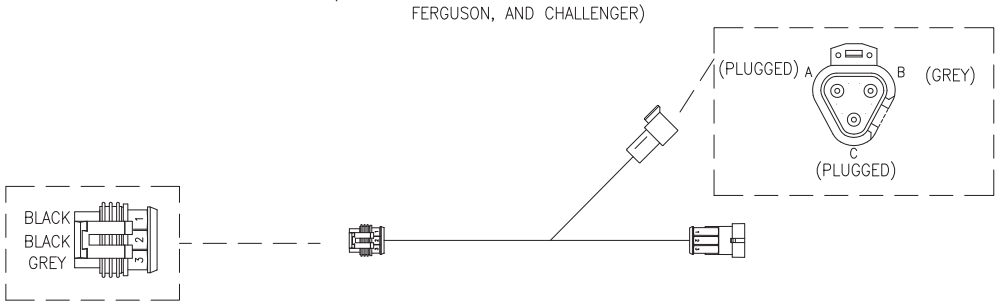
ENVIZIO PRO (II) SYSTEM DRAWING WITH KITS, CABLE OPTIONS, SMARTYIELD PRO



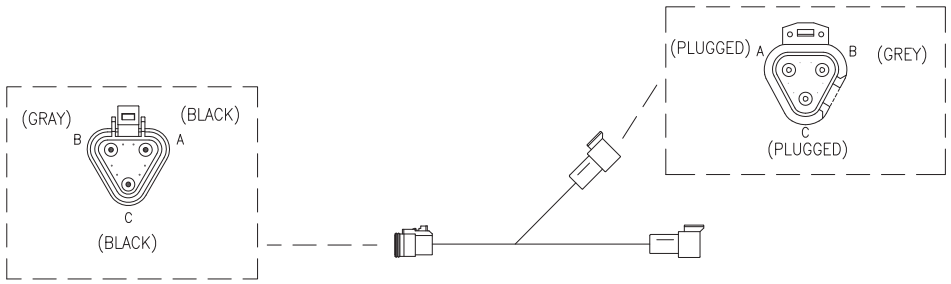
RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
11/11/13	E22336	DSP2	SDK	SDK	AJW2	BJH	A	054-9000-002

ENVIZIO PRO (II) SYSTEM DRAWING WITH KITS, CABLE OPTIONS, SMARTYIELD PRO

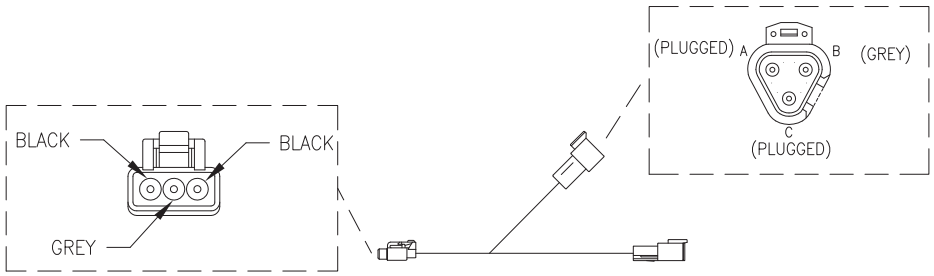
115-9000-016....CABLE, TEE, HEADER HEIGHT SENSOR,
AMP SUPERSEAL
(USED ON CERTAIN MODELS OF GLEANER, MASSEY FERGUSON, AND CHALLENGER)



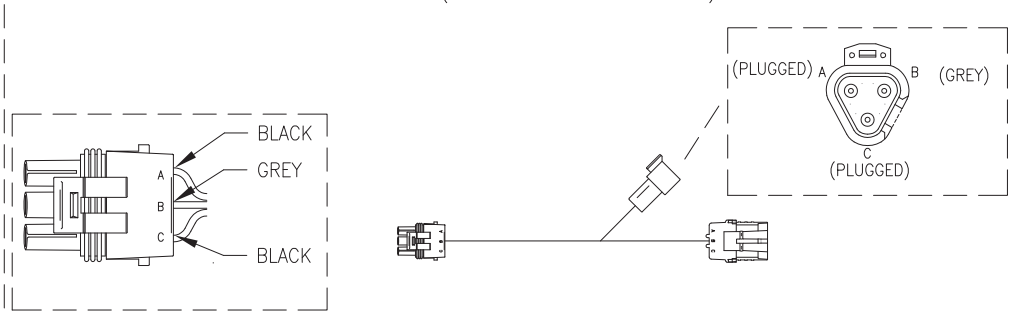
115-9000-017....CABLE, TEE, HEADER HEIGHT SENSOR,
DEUTSCH DT.
(USED ON CERTAIN MODELS OF CASE COMBINES AND AFTERMARKET SENSORS)



115-9000-018....CABLE, TEE, HEADER HEIGHT SENSOR,
DEUTSCH DTM
(USED ON CERTAIN MODELS OF CASE COMBINES)



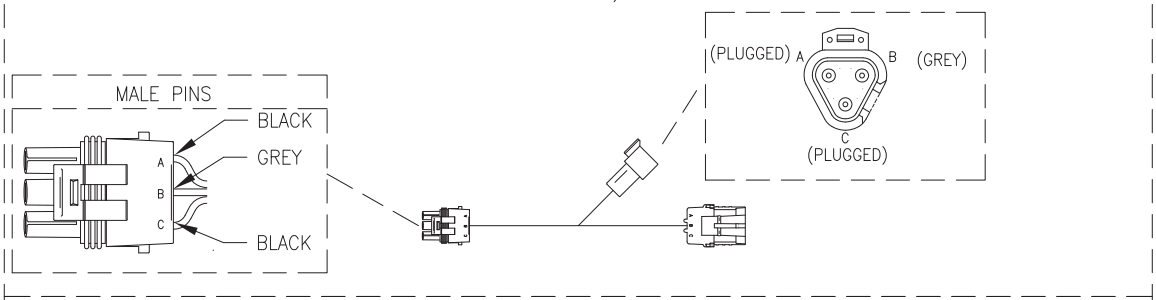
115-9000-019....CABLE, TEE, HEADER HEIGHT SENSOR,
WEATHERPACK FEMALE PINS, MALE SHROUD
(USED ON AFTERMARKET SENSORS)



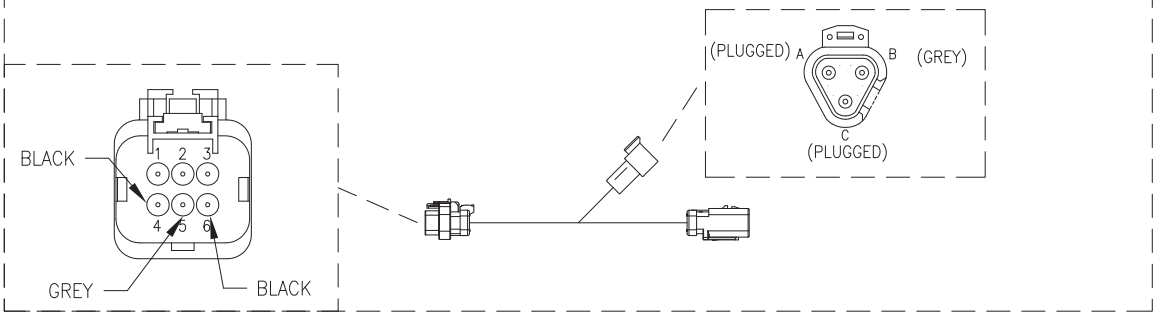
RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
11/06/13	E22361	DSP2	SDK	SDK	BSG	BJH	A	054-9000-007

ENVIZIO PRO (II) SYSTEM DRAWING WITH KITS, CABLE OPTIONS, SMARTYIELD PRO

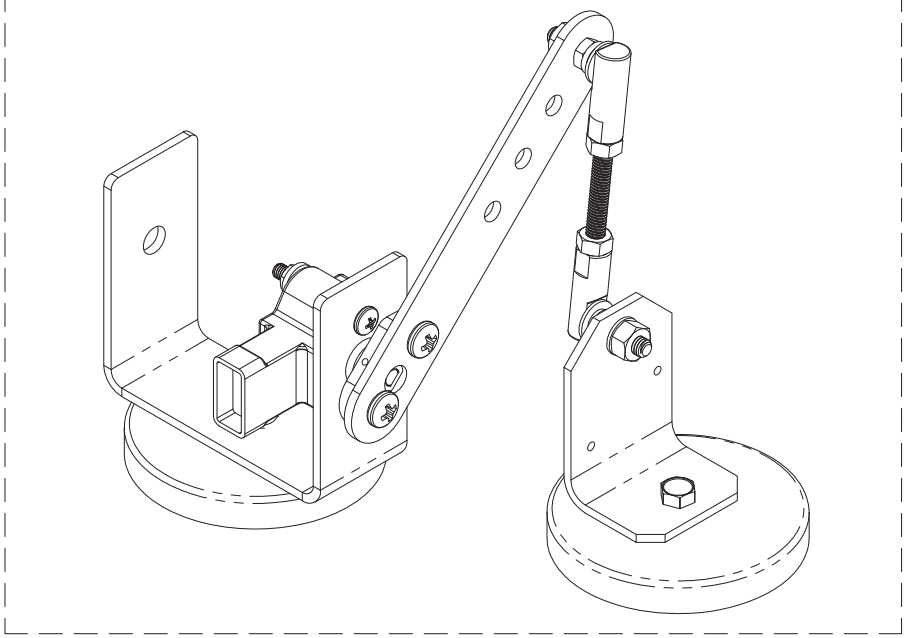
115-9000-021....CABLE, TEE, HEADER HEIGHT SENSOR, WEATHERPACK MALE PINS MALE SHROUD (USED ON CERTAIN MODELS DEERE, NEW HOLLAND COMBINES)



115-9000-023....CABLE, ADAPTER, HEADER HEIGHT SENSOR, AMPSEAL (JOHN DEERE S SERIES)

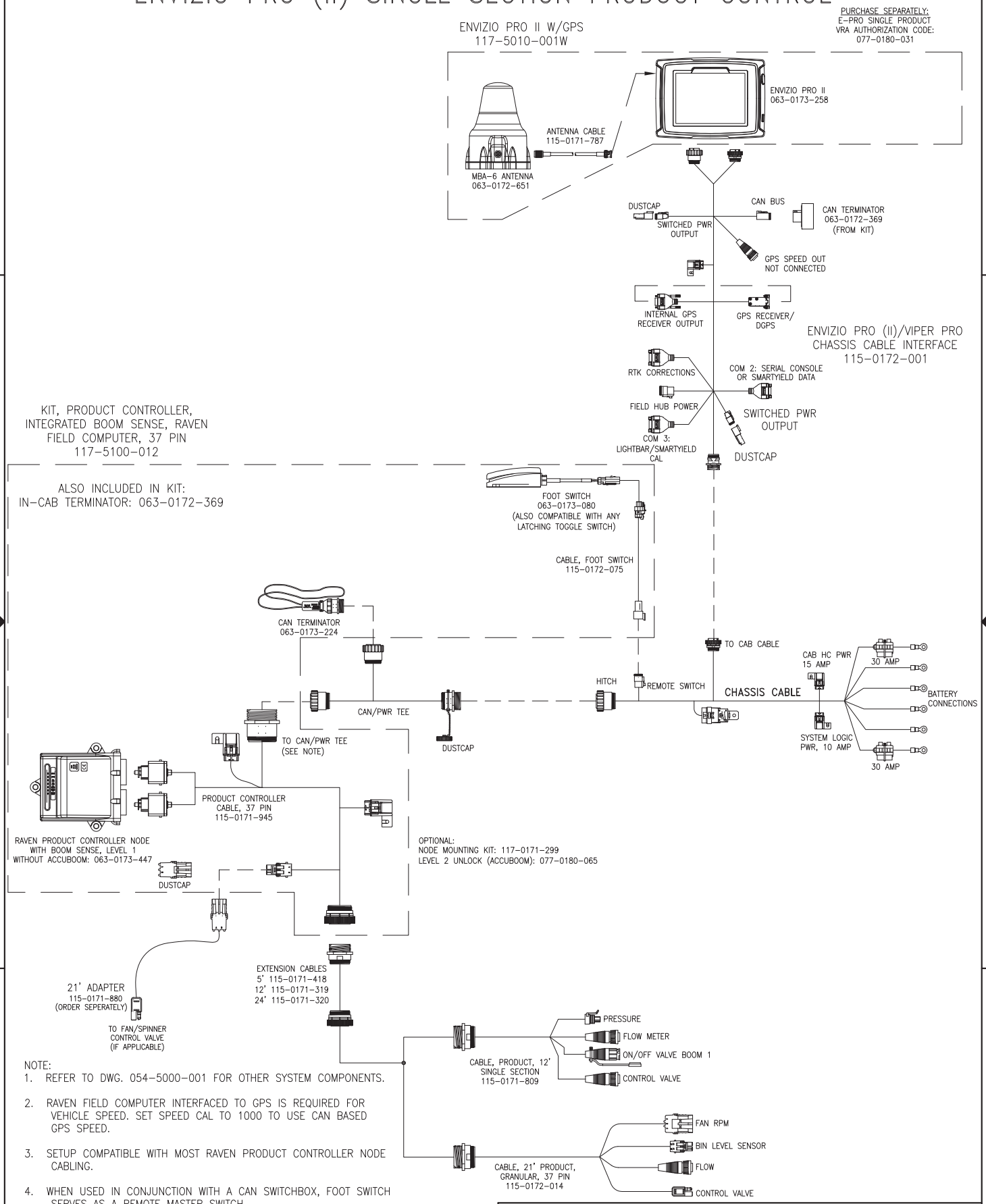


117-9000-007....KIT, ROTARY HEADER HEIGHT SENSOR



RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
11/06/13	E22361	DSP2	SDK	SDK	BSG	BJH	A	054-9000-007

ENVIZIO PRO (II) SINGLE SECTION PRODUCT CONTROL



NOTE:

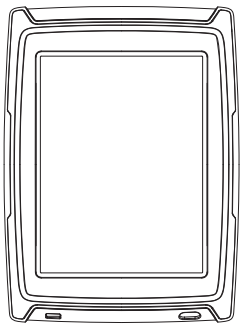
1. REFER TO DWG. 054-5000-001 FOR OTHER SYSTEM COMPONENTS.
2. RAVEN FIELD COMPUTER INTERFACED TO GPS IS REQUIRED FOR VEHICLE SPEED. SET SPEED CAL TO 1000 TO USE CAN BASED GPS SPEED.
3. SETUP COMPATIBLE WITH MOST RAVEN PRODUCT CONTROLLER NODE CABLING.
4. WHEN USED IN CONJUNCTION WITH A CAN SWITCHBOX, FOOT SWITCH SERVES AS A REMOTE MASTER SWITCH.
5. MULTIPLE SECTIONS SUPPORTED WHEN PRODUCT CONTROLLER IS LEVEL 2 AND USED IN CONJUNCTION WITH ENVIZIO PRO ACCUBOOM ON-SCREEN SWITCHBOX.

RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/29/12	E19265	DSP	AT	DRG	CRS	JJP	A	054-5001-010
3/22/13	E20584	GE	AT	BY	CRS	AJK2	B	054-5001-010

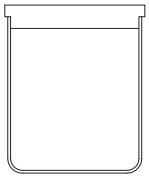
EN FOR 30 "A" SYSTEM BORDER - REV B

VIPER PRO
COMPONENTS SOLD SEPARATELY

VIPER PRO CONSOLE
063-0172-879



MOUNTING BRACKET: 107-0171-415



ENVIZIO PRO (II)/VIPER PRO
CHASSIS CABLE INTERFACE, GEN II
115-0172-001

DUSTCAP

SWITCHED PWR
OUTPUT

CAN BUS

GPS SPEED OUT
(IF AVAILABLE)

INTERNAL GPS
RECEIVER OUTPUT
(NOT AVAILABLE
ON VIPER PRO)

GPS RECEIVER/
DGPS

RTK CORRECTIONS
(NOT CONNNECTED)

COM 2: SERIAL CONSOLE,
WEATHERSTATION

FIELD HUB/RECEIVER POWER

SWITCHED PWR
OUTPUT

DUSTCAP

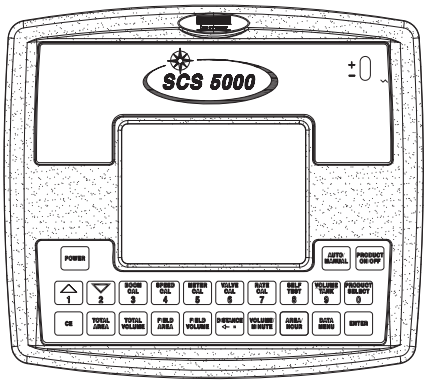
COM 3:
LIGHTBAR/WEATHERSTATION,
SERIAL RATE
INTERFACE

TO CHASSIS CABLE
OR SMARTRAX TEE CABLE

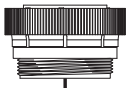
NOTE:
REFER TO DWG. 054-5000-001 FOR OTHER SYSTEM COMPONENTS

RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	SSS	AT	LLM	DAS	MAP	A	054-5010-003
5/26/11	E17536		SS	TAC		DAS	B	054-5010-003

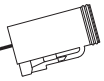
SCS 5000
COMPONENTS SOLD SEPARATELY

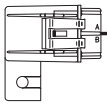


SCS 5000
063–0172–894

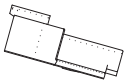


CAN BUS

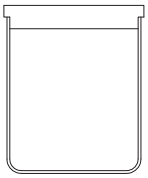




SWITCHED PWR
OUTPUT

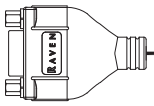


DUSTCAP

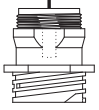


MOUNTING BRACKET
107–0171–415

SCS 5000
CONSOLE CABLE
(CHASSIS CABLE INTERFACE)
115–0171–959



COM1



TO CHASSIS CABLE

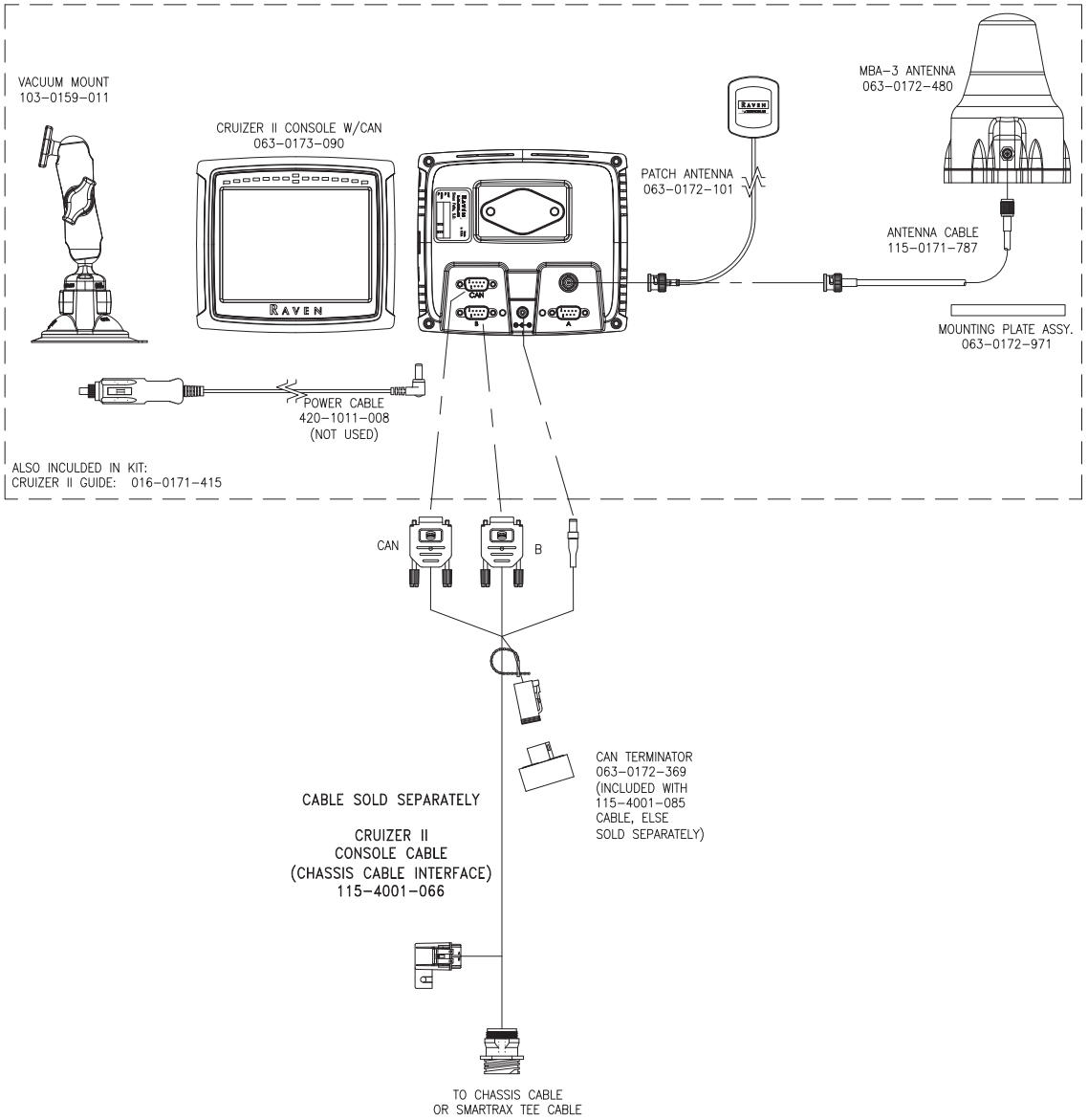
NOTE:

REFER TO DWG. 054–5000–001 FOR OTHER SYSTEM COMPONENTS

RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	JAB	AT	TLH	CRS	MAP	A	054–5010–004

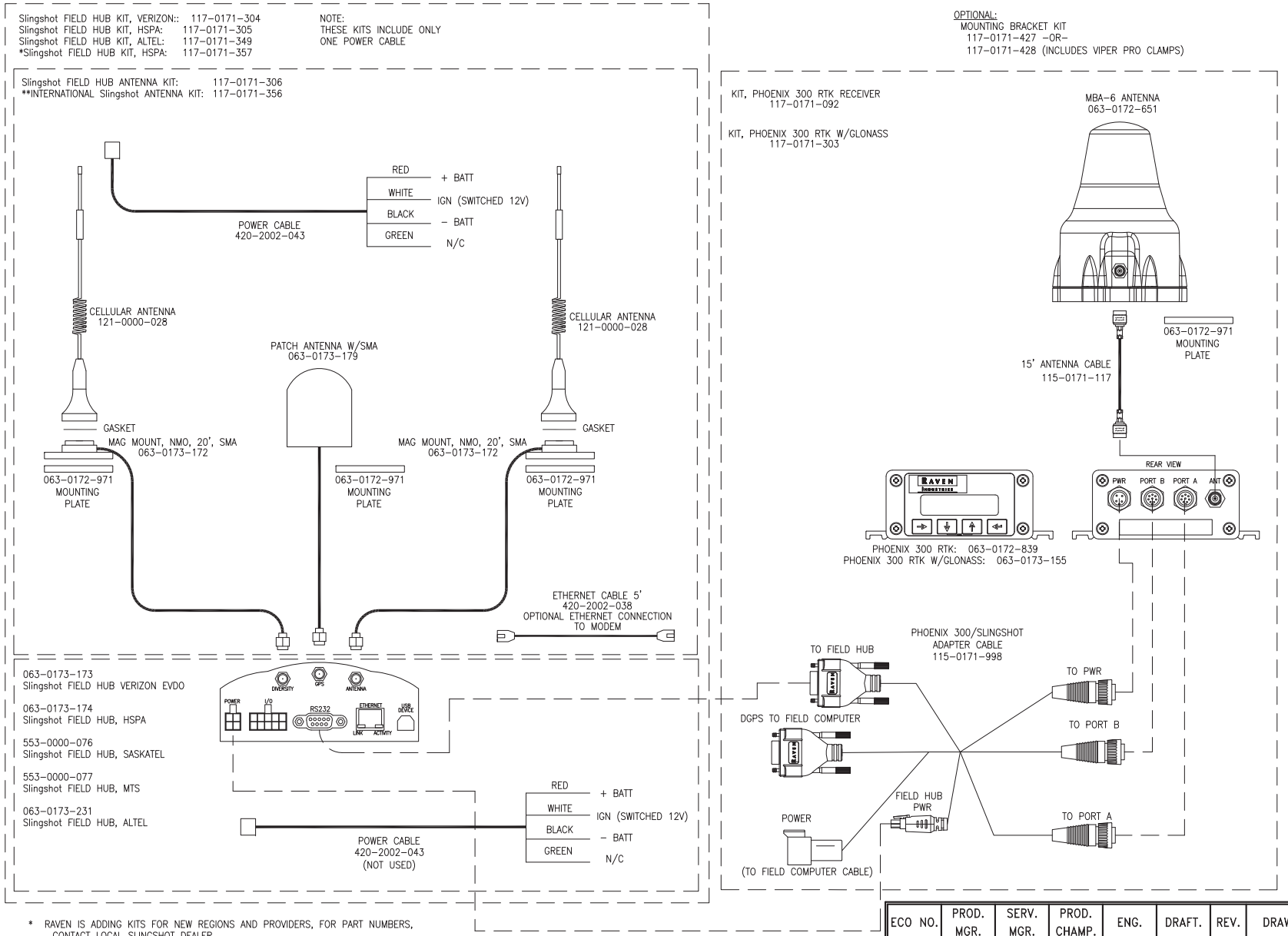
CRUIZER II WITH GPS

KIT P/N 117-0171-247 PATCH ANTENNA
KIT P/N 117-0171-249 MBA-3 ANTENNA



RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
11/3/10	E16795	TPH	TAC	RJB	LDE	MAP	A	054-5010-005

slingshot/PHOENIX 300 RTK SYSTEM



* RAVEN IS ADDING KITS FOR NEW REGIONS AND PROVIDERS, FOR PART NUMBERS, CONTACT LOCAL SLINGSHOT DEALER.

** THIS ANTENNA KIT WILL SUBSTITUTE 121-0000-028 WITH 121-0000-031.

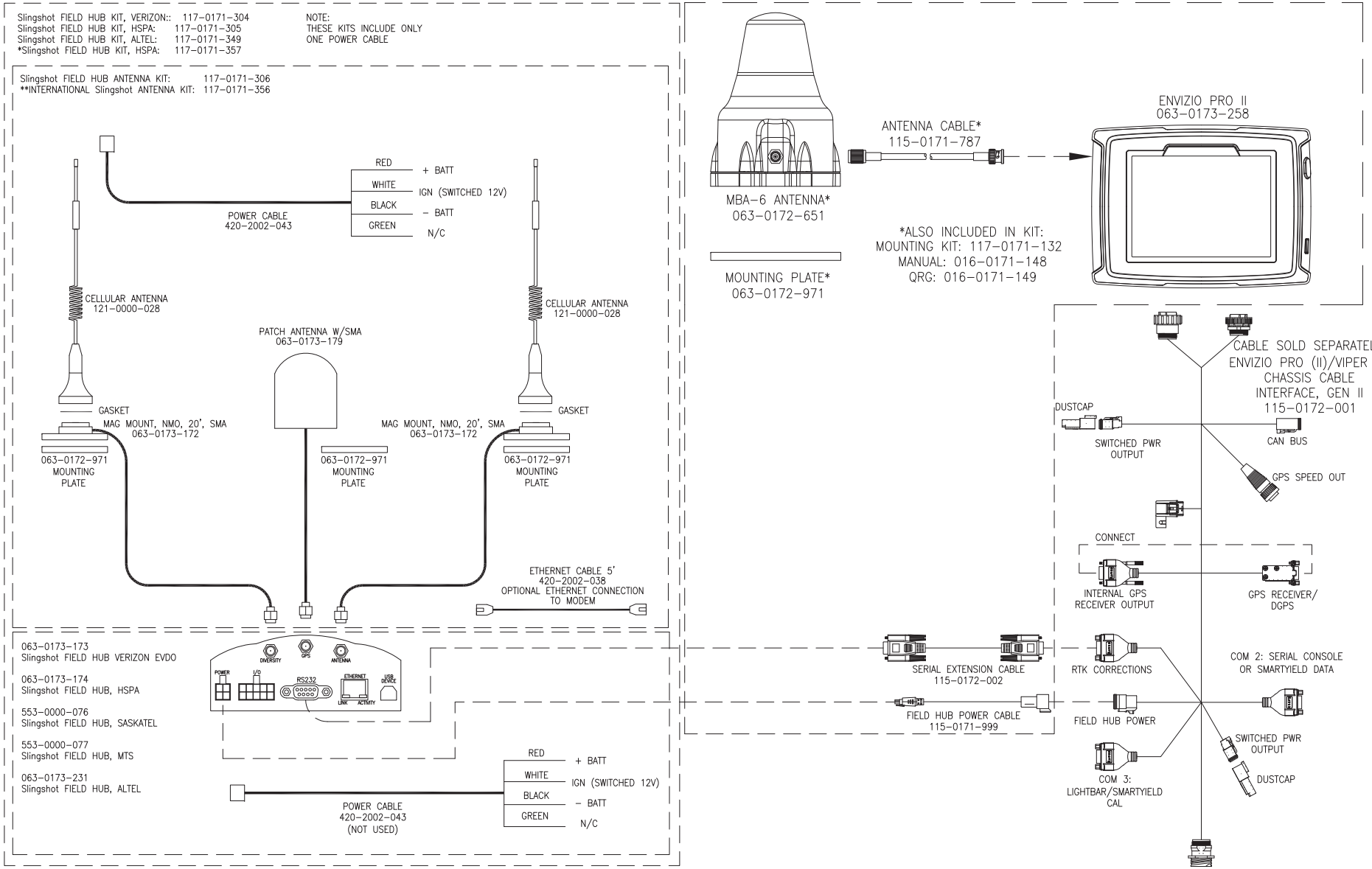
ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E15929	JEK	TAC	LLM	EDF	MAP	B	054-3600-001
E17536	JEK	TAC	LLM	LDE	AJK2	C	–

ENVIZIO PRO II WITH GPS (MBA-6 ANTENNA)
KIT P/N 117-5010-001K OR 117-5010-001KG

Slingshot FIELD HUB KIT, VERIZON:: 117-0171-304
Slingshot FIELD HUB KIT, HSPA: 117-0171-305
Slingshot FIELD HUB KIT, ALTEL: 117-0171-349
*Slingshot FIELD HUB KIT, HSPA: 117-0171-357

NOTE:
THESE KITS INCLUDE ONLY
ONE POWER CABLE

Slingshot FIELD HUB ANTENNA KIT: 117-0171-306
**INTERNATIONAL Slingshot ANTENNA KIT: 117-0171-356



* RAVEN IS ADDING KITS FOR NEW REGIONS AND PROVIDERS, FOR PART NUMBERS, CONTACT LOCAL SLINGSHOT DEALER.

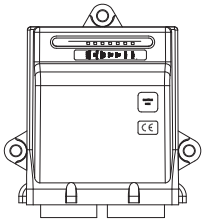
** THIS ANTENNA KIT WILL SUBSTITUTE 121-0000-028 WITH 121-0000-031.

ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
E15929	JEK	TAC	LLM	EDF	MAP	B	054-3600-001
E17536	JEK	TAC	LLM	LDE	AJK2	C	-

PAGE 2 OF 2

CAN SMARTRAX, CHALLENGER MT 700/800C STEER READY

SMARTRAX KIT: 117-5033-001



CAN SMARTRAX 3D NODE
063-0173-031

115-4001-089
CABLE,
CHALLENGER MT

* IF USING 115-4001-085, LEAVE JUMPER PLUG ON CONNECTION LABELED "TO SMARTRAX NODE".

TO FIELD COMPUTER CABLE
(115-0172-001 OR
115-4001-066)

ENABLE

ENGAGEMENT SWITCH
063-0172-470

CHALLENGER CAN

TO
115-4001-085*
(STEERING ONLY) OR
115-0171-915

TEE INTO
CHALLENGER
CAN BUS

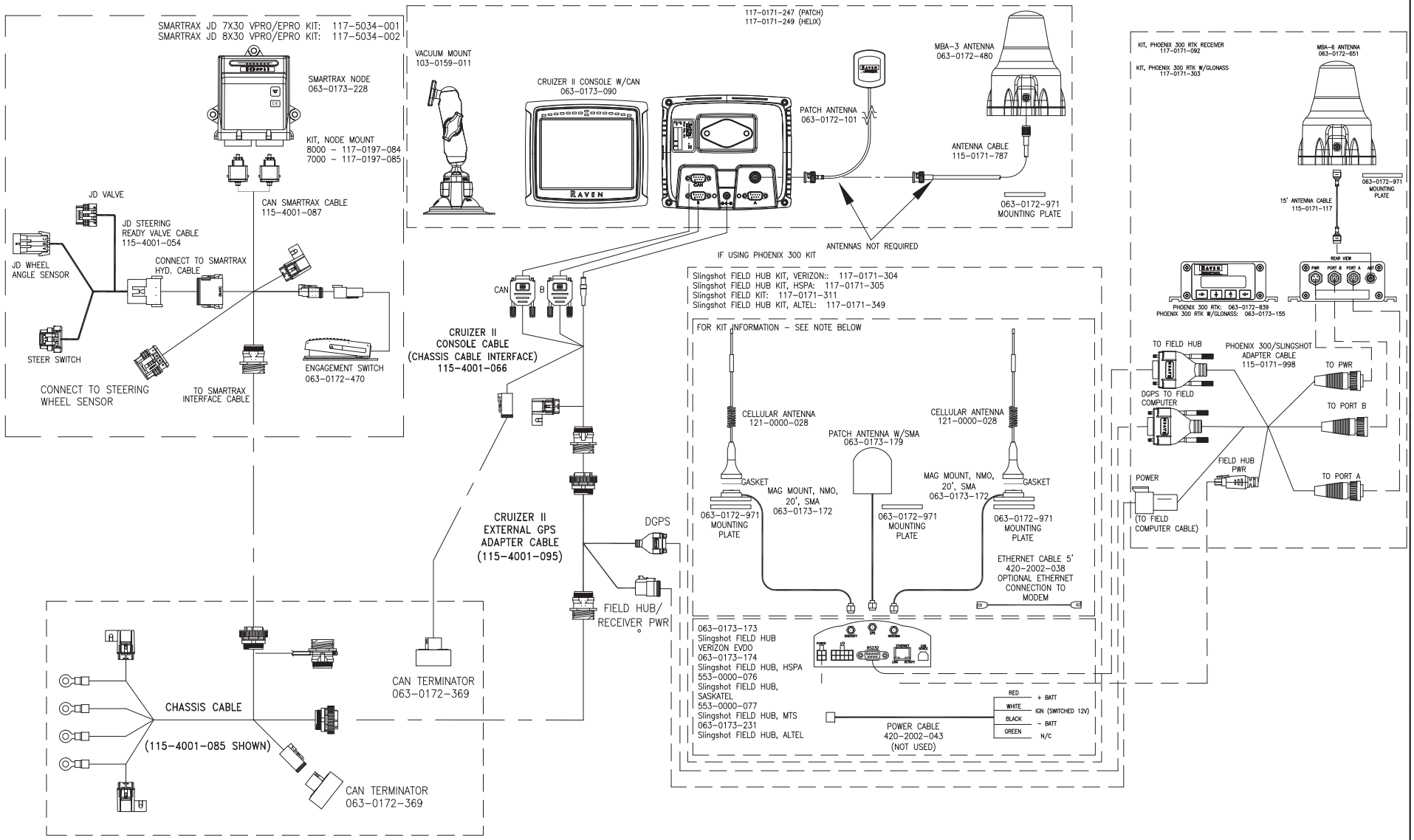
KIT ALSO INCLUDES;

TERRAIN COMP MANUAL (P/N 016-0171-277)
CHALLENGER TRACK MT MANUAL (P/N 016-0197-003)
NODE MOUNTING KIT (P/N 117-0197-051)

NOTE:
REFER TO DWG. 054-5000-001 FOR OTHER SYSTEM COMPONENTS.

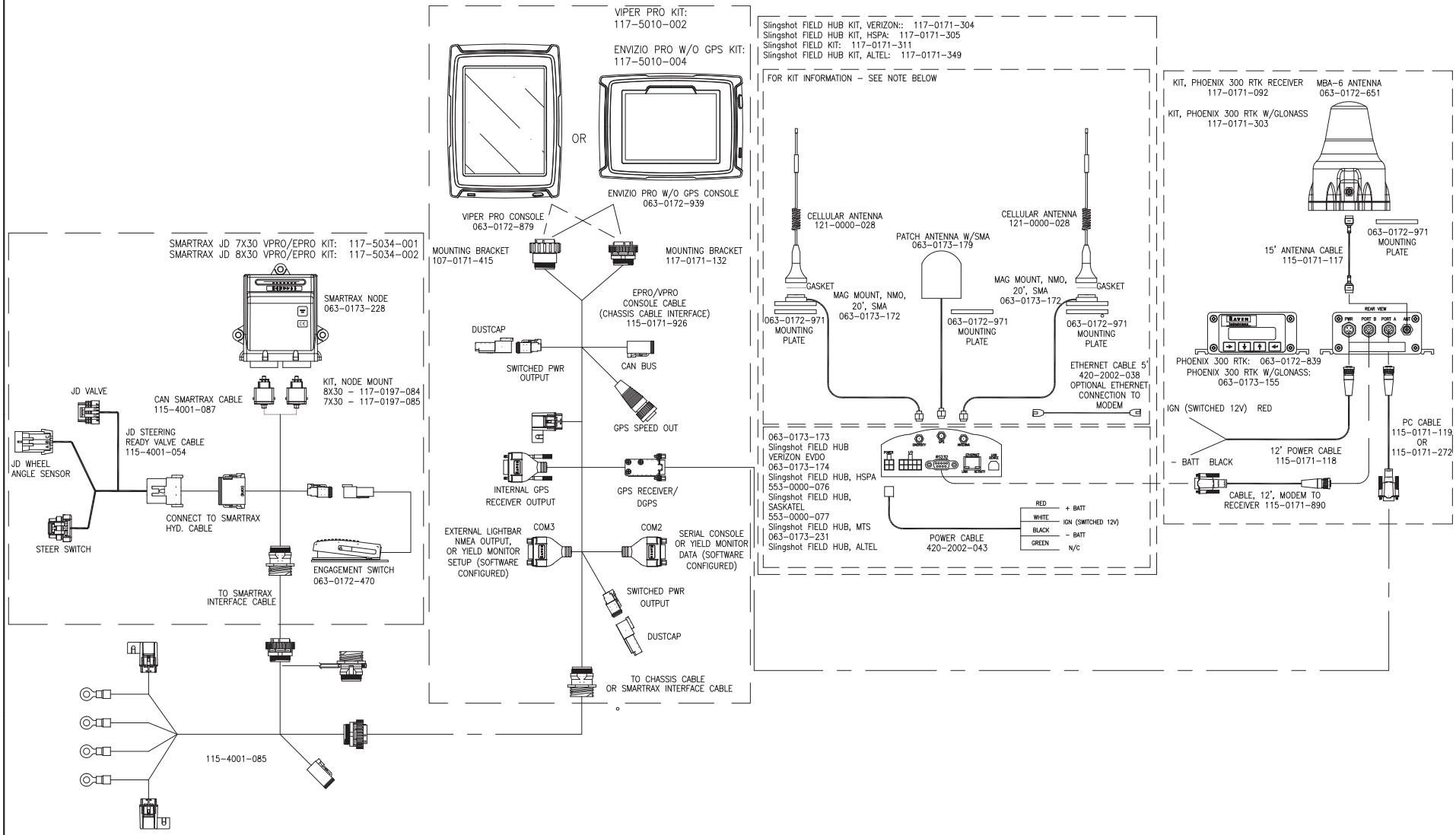
RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
4/05/11	E17378	TPH	TAC	SAL2	BGO	MAP	B	–
5/26/11	E17707	TPH	TAC	SAL2	BGO	GRG	C	054-5033-001

CRUIZER II JOHN DEERE FRONT STEER/STEERING READY W/P300 AND SLINGSHOT



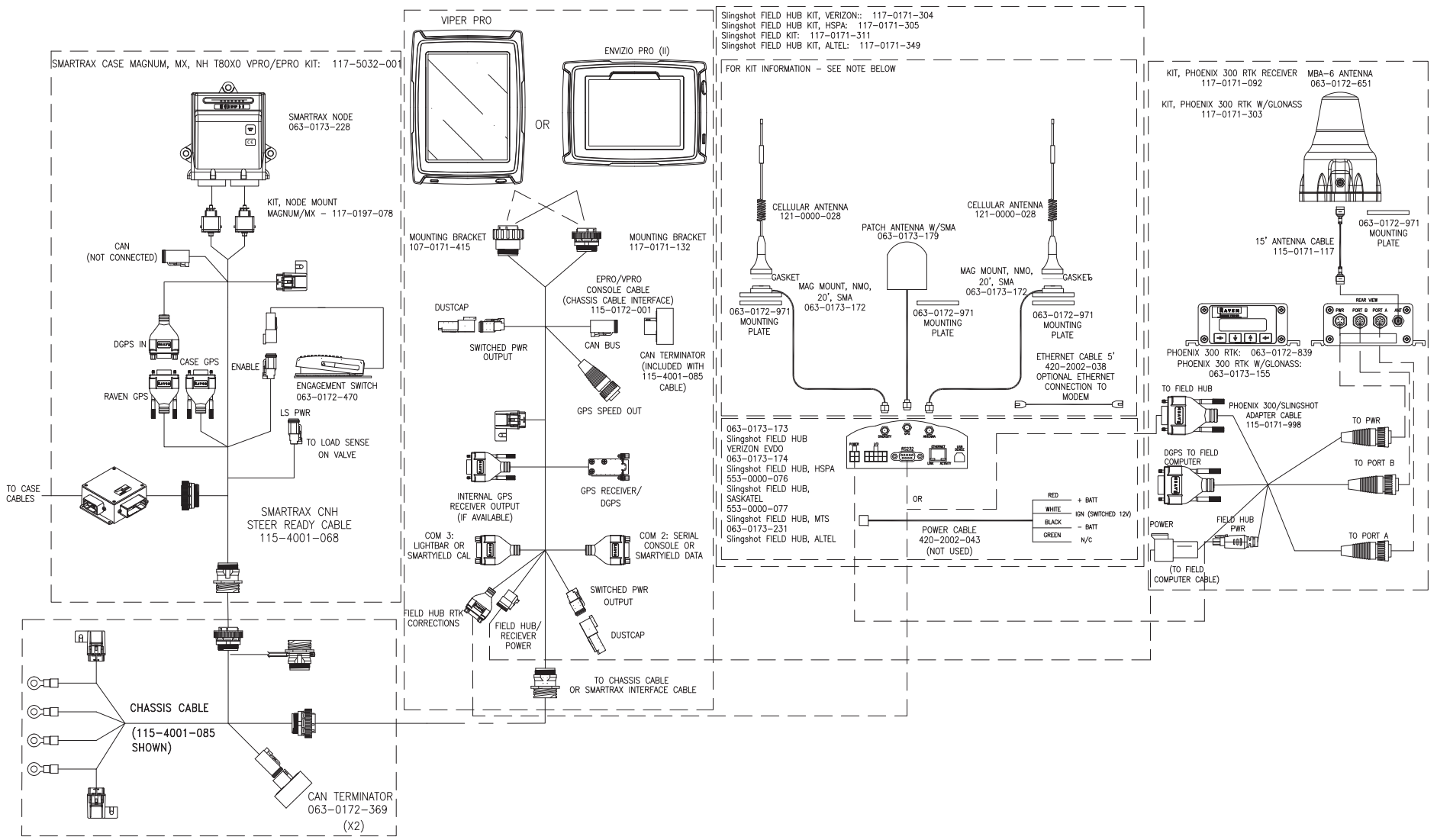
RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
5/26/11	E16830	TPH	AT	DLG	LDE	JJP	A	054-3003-016

ENVIZIO PRO/VIPER PRO JOHN DEERE FRONT STEER/STEERING READY W/SLINGSHOT



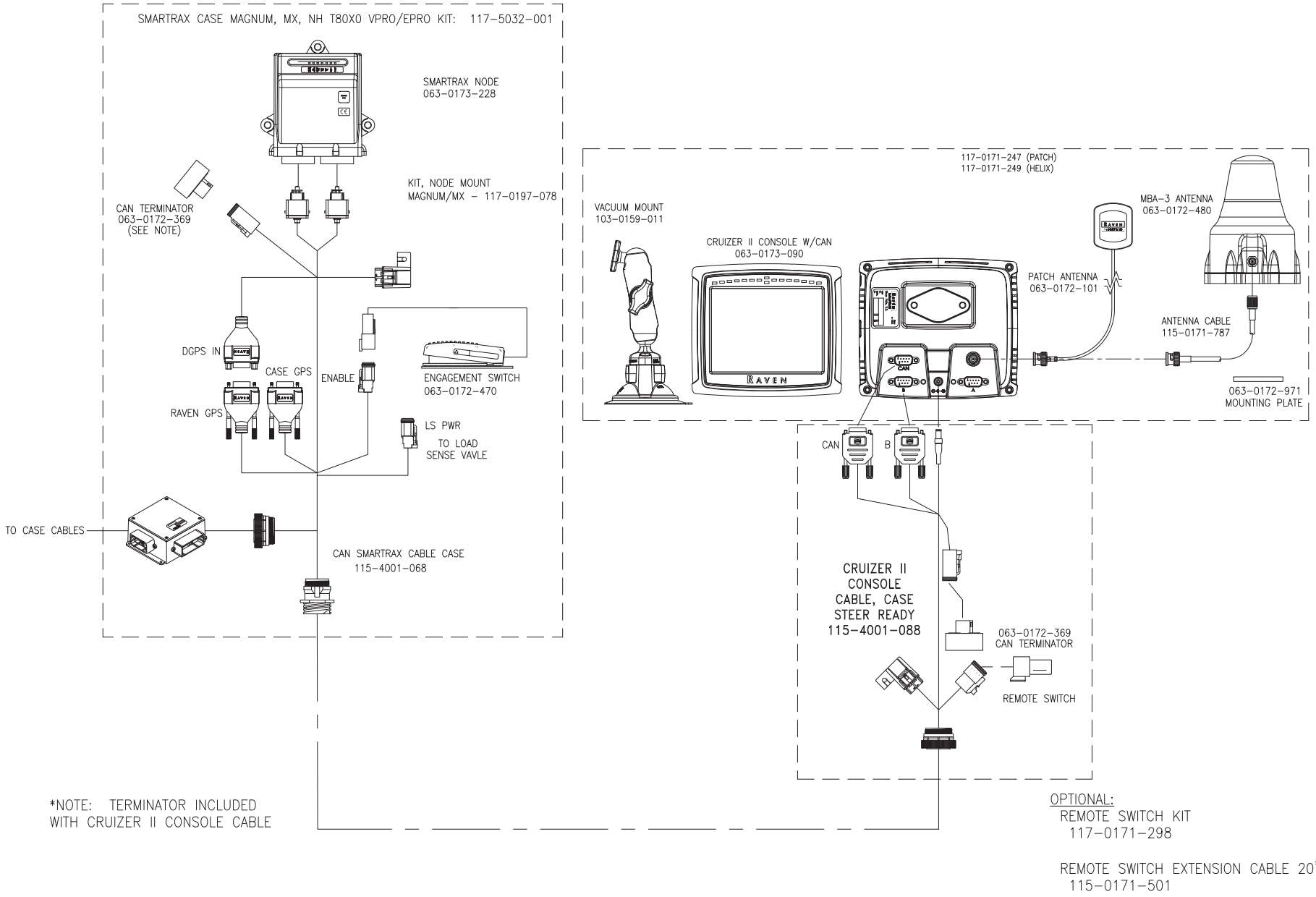
RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
11/11/10	E16620	TPH	TAC	SAL2	BDB	AJK2	A	054-3003-010

ENVIZIO PRO/VIPER PRO CASE IH/NEW HOLLAND FRONT STEER/STEERING READY W/SLINGSHOT



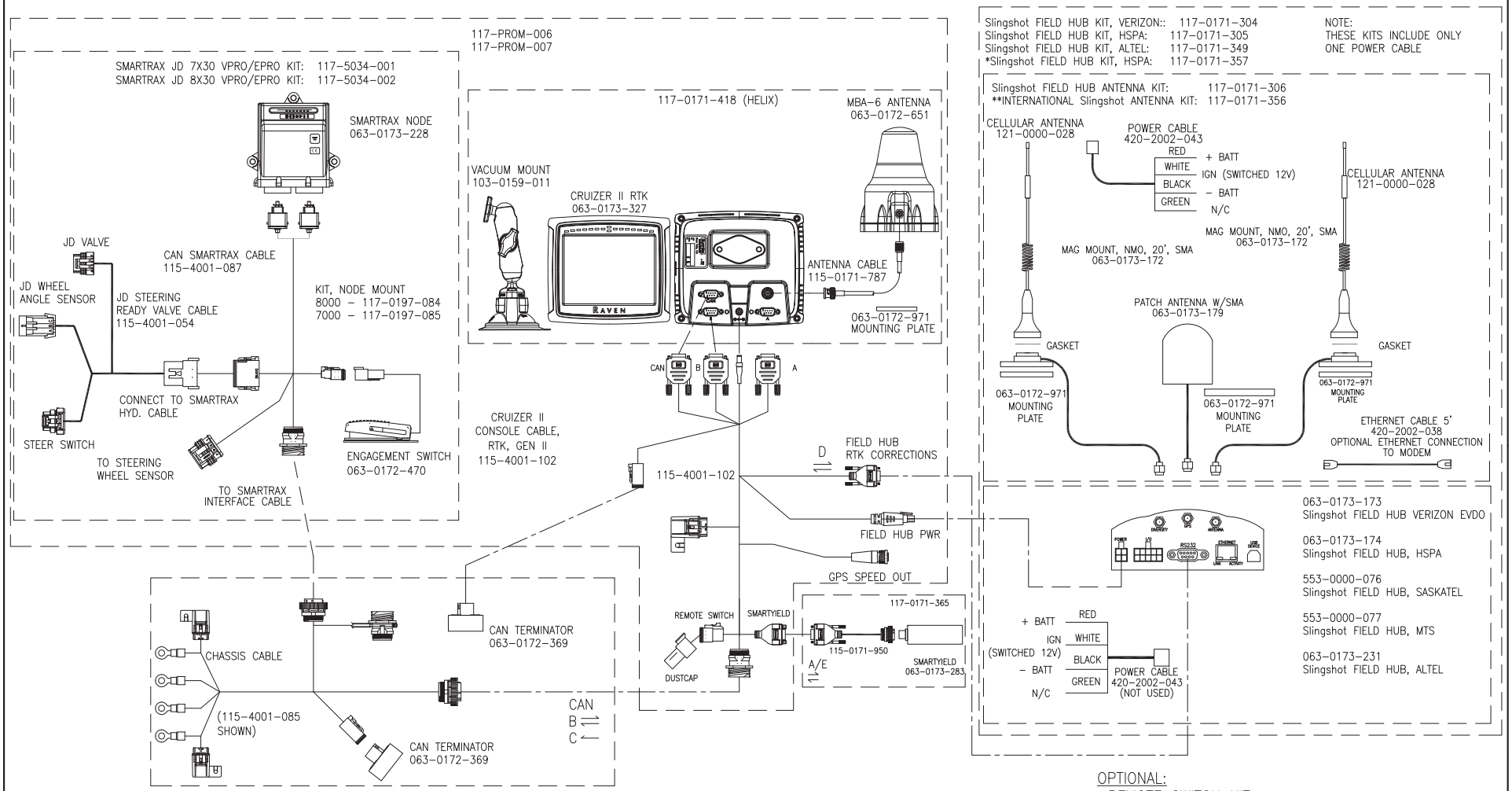
RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
5/26/11	E17070	TPH	AT	DLG	LDE	JJP	A	054-3010-030

CRUIZER II CASE IH/NEW HOLLAND FRONT STEER/STEERING READY



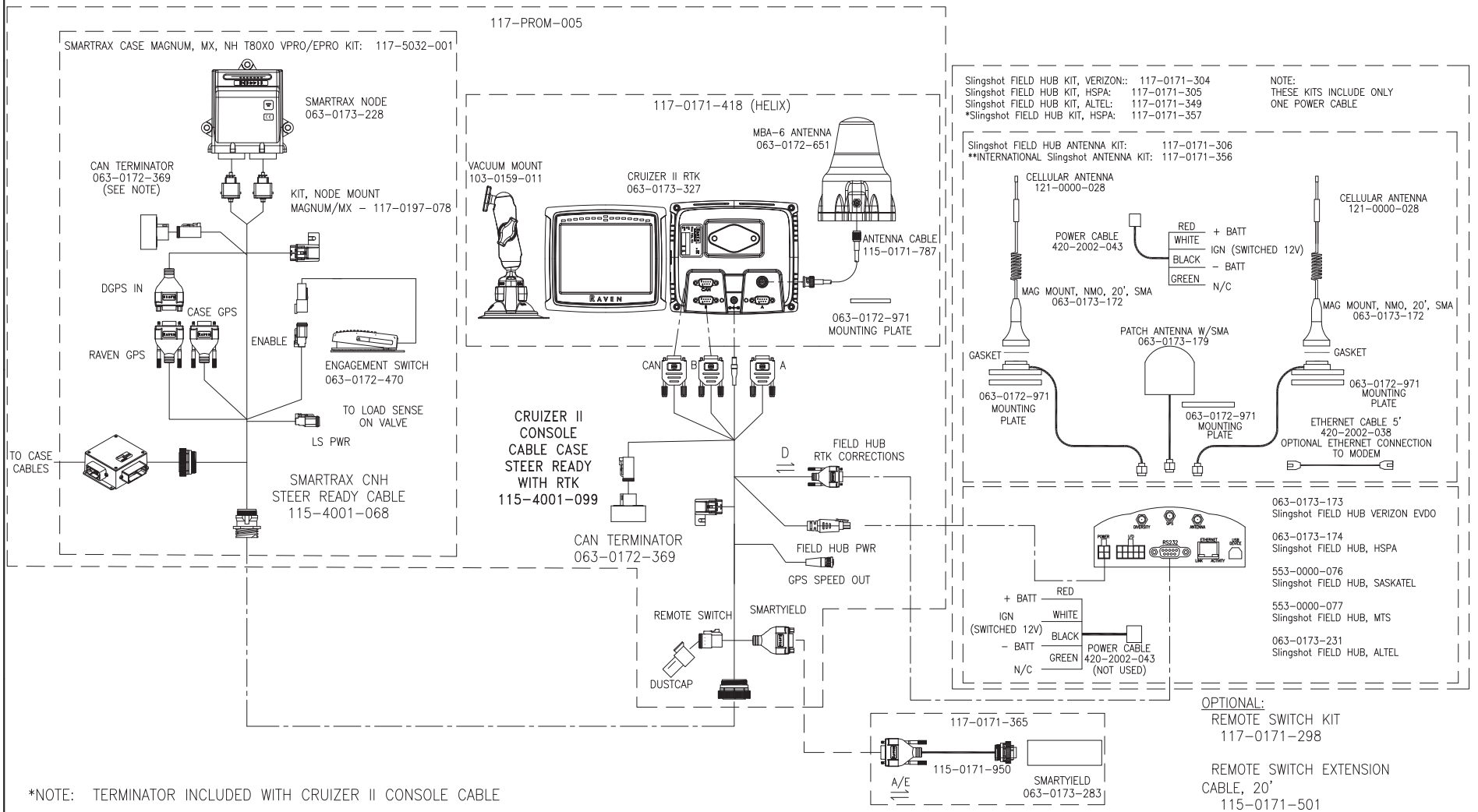
RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
05/26/11	E16830	TPH	AT	DLG	LDE	JJP	A	054-3010-028

CRUIZER II RTK JOHN DEERE FRONT STEER/STEERING READY W/SLINGSHOT



RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
5/26/11	E17070	TPH	AT	DLG	LDE	JJP	A	054-3003-017

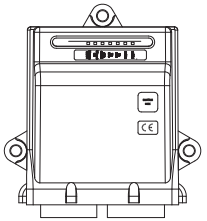
CRUIZER II RTK CASE IH FRONT STEER/STEERING READY W/SLINGSHOT



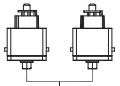
RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
5/26/11	E17070	TPH	AT	DLG	LDE	JJP	A	054-3010-029

CAN SMARTRAX/SMARTSTEER

SMARTSTEER KIT W/MDU: 117-5030-001
SMARTSTEER CONTROLLER KIT: 117-5030-002

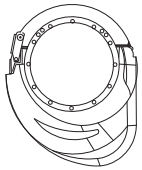


SMARTRAX/SMARTSTEER NODE
063-0173-074



CAN SMARTRAX CABLE
115-4001-049

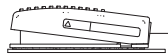
OPTIONAL
SMARTSTEER KIT
117-0196-003



SMARTSTEER CABLE
115-4001-061

CONNECT TO SMARTRAX
HYD. OR SMARTSTEER

TO SMARTRAX
INTERFACE CABLE
115-4001-085 (STEERING ONLY),
115-4001-070 (STEERING +, 6"), OR
115-4001-071 (STEERING +, 72")



ENGAGEMENT SWITCH
063-0172-470

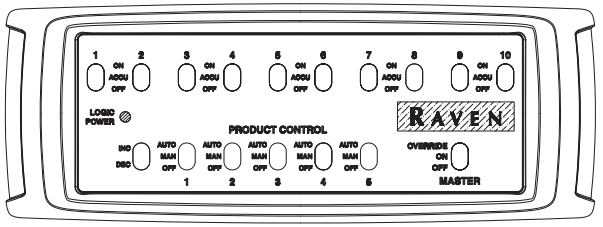
KIT ALSO INCLUDES:

SMARTRAX TERRAIN COMP MANUAL (P/N 016-0171-277)
HARDWARE INSTALLATION MANUAL (P/N 016-0171-280)
UNIVERSAL SMARTSTEER BRACKET KIT (P/N 117-0181-024)

NOTE:
REFER TO DWG. 054-5000-001 FOR OTHER SYSTEM COMPONENTS.

RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
11/10/10	E16821	TPH	AT	SAL2	BGO	MAP	A	054-5030-001
11/11/10	E16620	TPH	TAC	SAL2	BDB	AJK2	B	054-5030-001

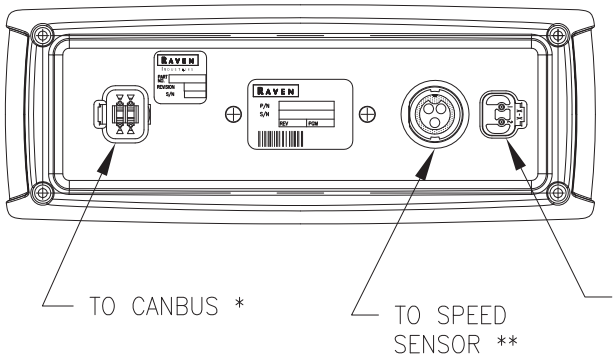
RAVEN CAN SWITCHBOX KITS



P/N 063-3001-002

SELECT ONE (1) OF THE FOLLOWING KITS
(INCLUDES SWITCHBOX AND APPROPRIATE MOUNTING HARDWARE)

- RAVEN CAN SWITCHBOX TO ENVIZIO PRO: 117-5020-001
- RAVEN CAN SWITCHBOX TO VIPER PRO: 117-5020-002
- RAVEN CAN SWITCHBOX TO SCS 5000: 117-5020-003



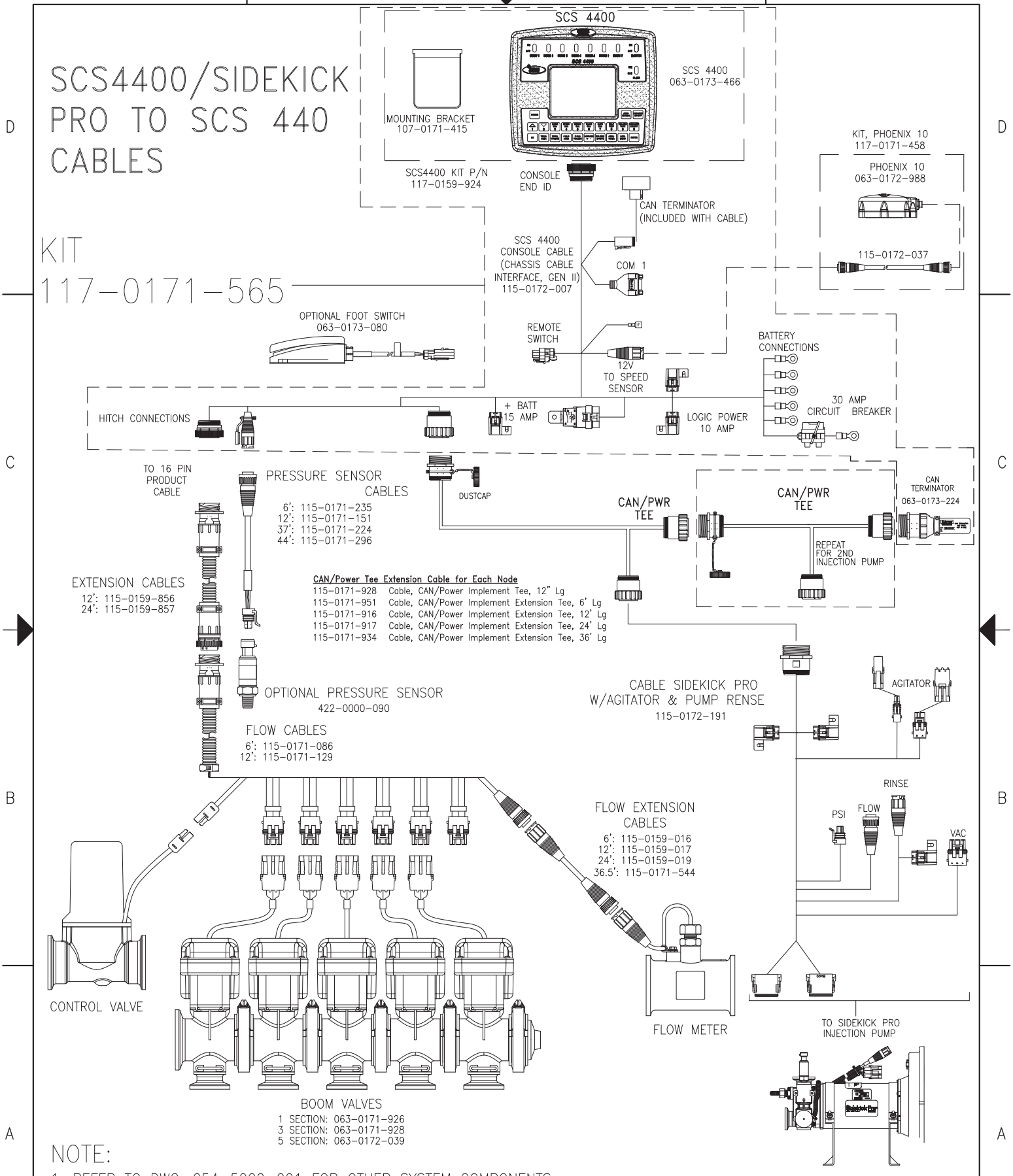
* CONNECTIONS INCLUDED ON CONSOLE/FIELD COMPUTER CABLE. SWITCH BOX INCLUDES INTERNAL CAN TERMINATOR AND CAN POWER SOURCE.

** USE SPEED EXTENSION CABLE TO INTERFACE TO RADAR (12V SOURCED TO RADAR; NO POWER ADAPTER CABLE NECESSARY.), OR OBTAIN GPS SPEED FROM FIELD COMPUTER CABLE (IF EQUIPPED).

RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	JAB	AT	TLH	CRS	MAP	A	054-5020-001

SCS4400/SIDEKICK PRO TO SCS 440 CABLES

KIT 117-0171-565



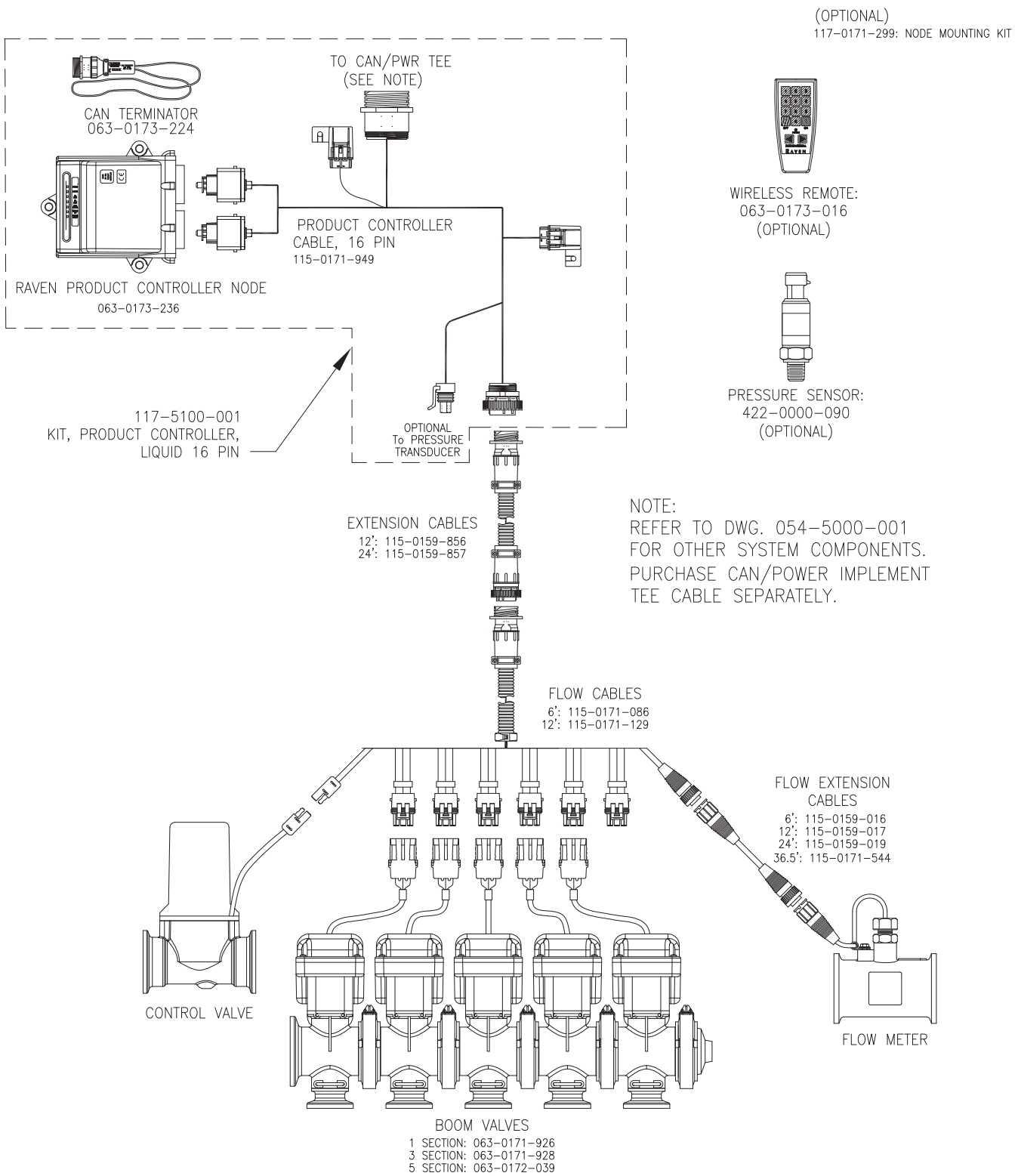
NOTE:

1. REFER TO DWG. 054-5000-001 FOR OTHER SYSTEM COMPONENTS.
2. SPEED CONNECTION FOR USE WITH 12V SENSORS ONLY.

PAGE 1 OF 1

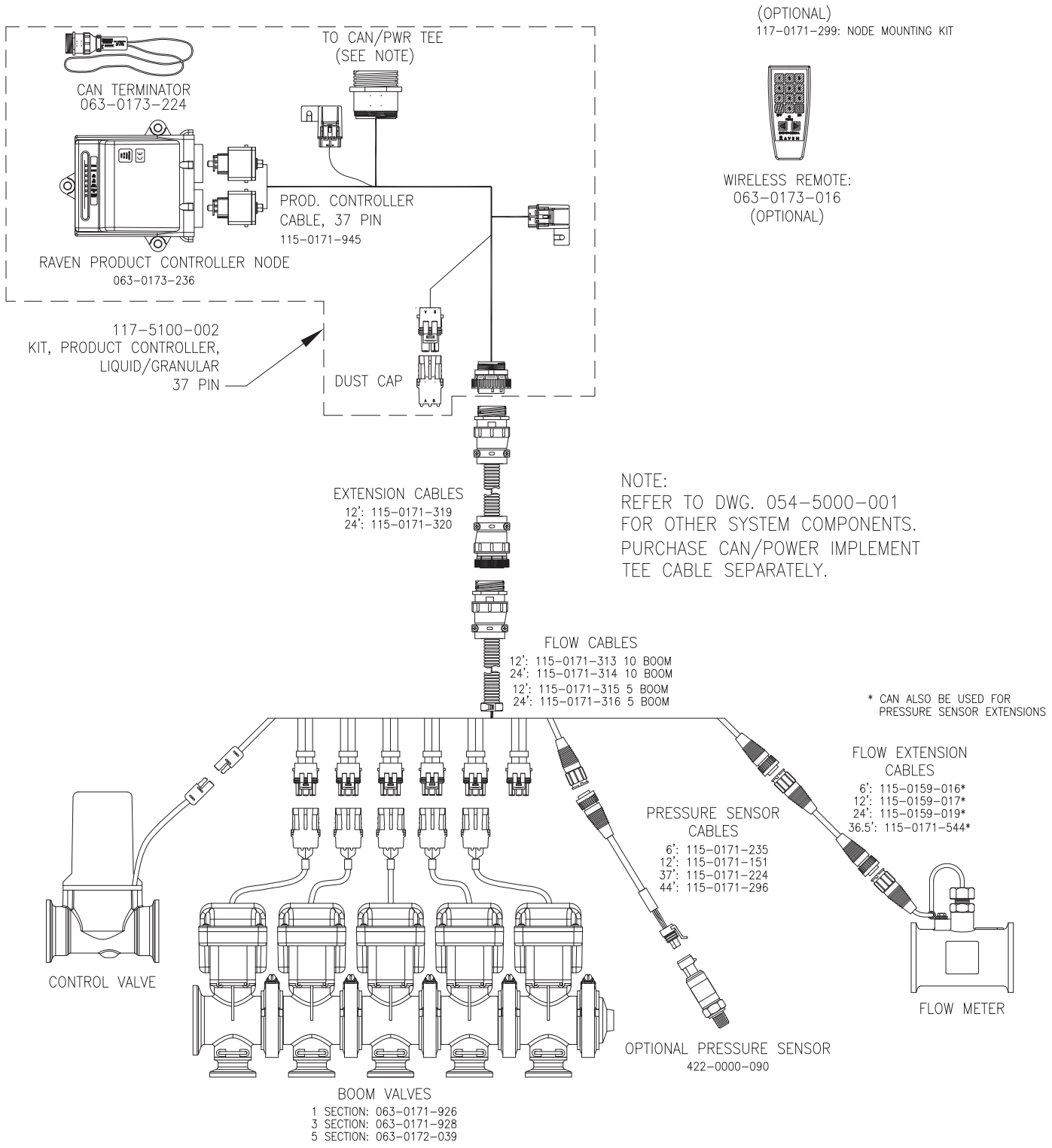
RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
11/25/13	E22425	GLE	LLM2	BCN	NAP	JJP	A	054-2840-018

PRODUCT CONTROLLER LIQUID SYSTEM
16 PIN PRODUCT CABLE



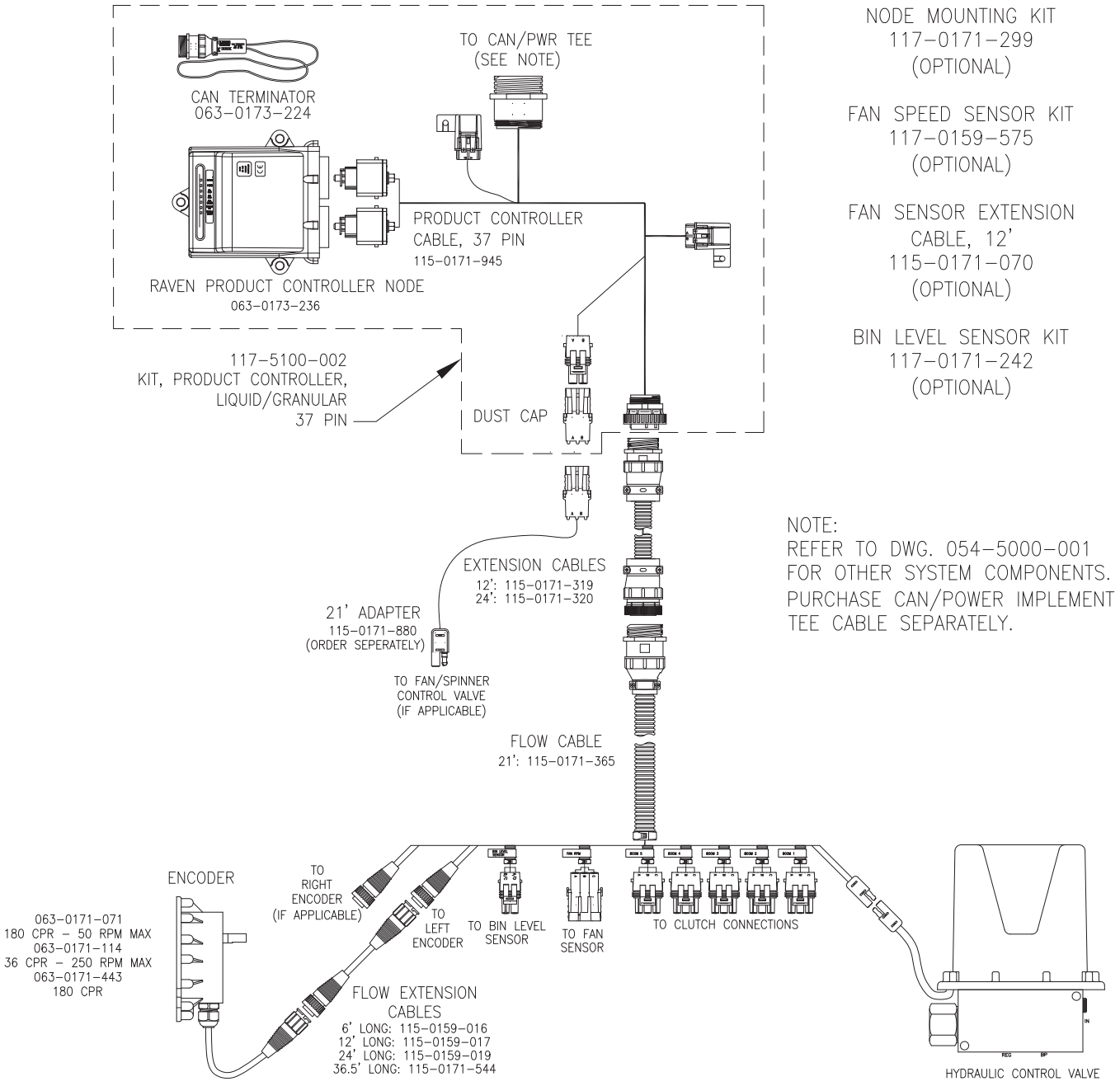
RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	JAB	AT	TLH	CRS	MAP	A	054-5100-001

PRODUCT CONTROLLER LIQUID SYSTEM
37 PIN PRODUCT CABLE



RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	JAB	AT	TLH	CRS	MAP	A	054-5100-002

PRODUCT CONTROLLER GRANULAR SYSTEM
37 PIN PRODUCT CABLE



NODE MOUNTING KIT
117-0171-299
(OPTIONAL)

FAN SPEED SENSOR KIT
117-0159-575
(OPTIONAL)

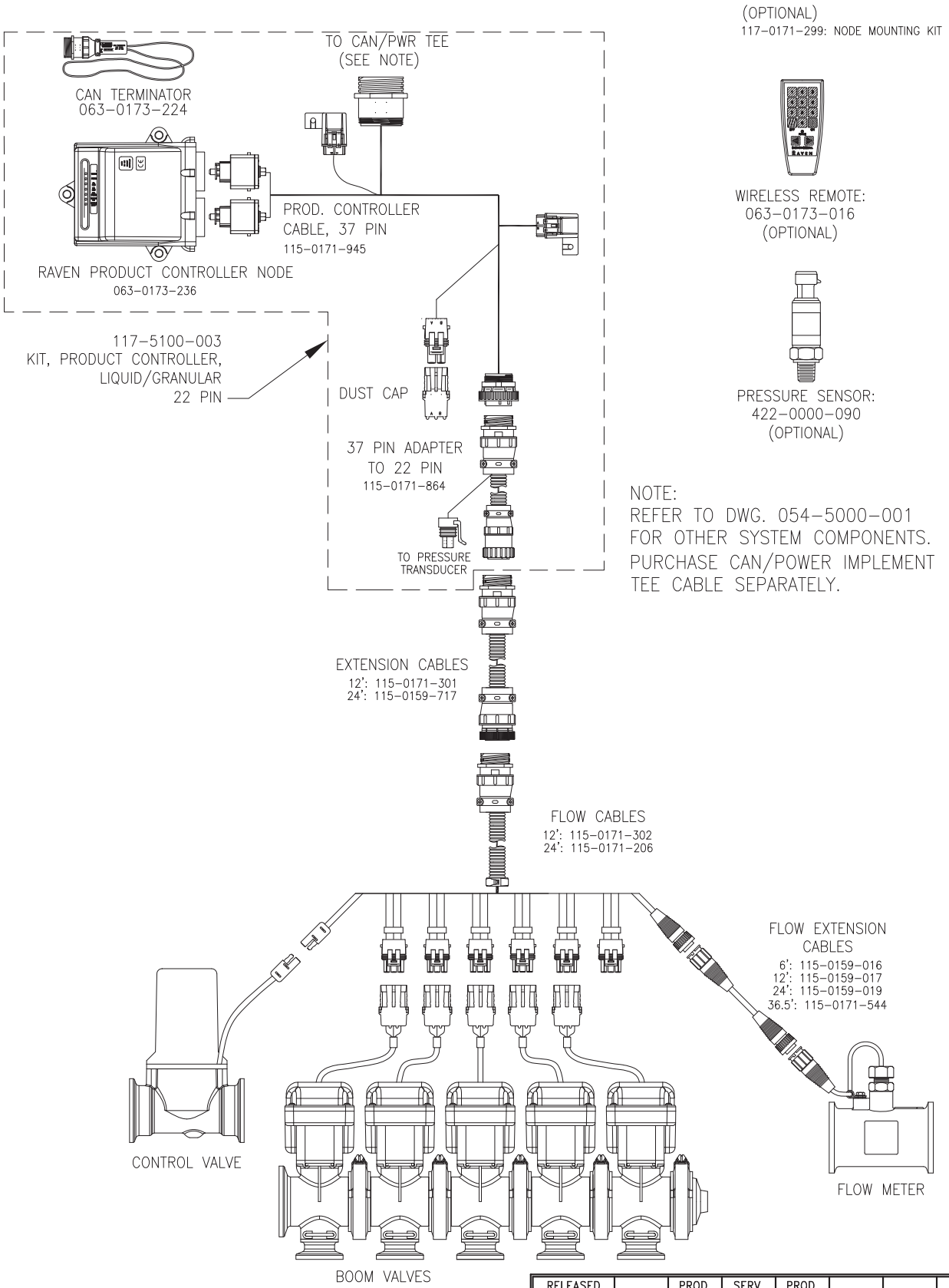
FAN SENSOR EXTENSION
CABLE, 12'
115-0171-070
(OPTIONAL)

BIN LEVEL SENSOR KIT
117-0171-242
(OPTIONAL)

NOTE:
REFER TO DWG. 054-5000-001
FOR OTHER SYSTEM COMPONENTS.
PURCHASE CAN/POWER IMPLEMENT
TEE CABLE SEPARATELY.

RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	JAB	AT	TLH	CRS	MAP	A	054-5100-002

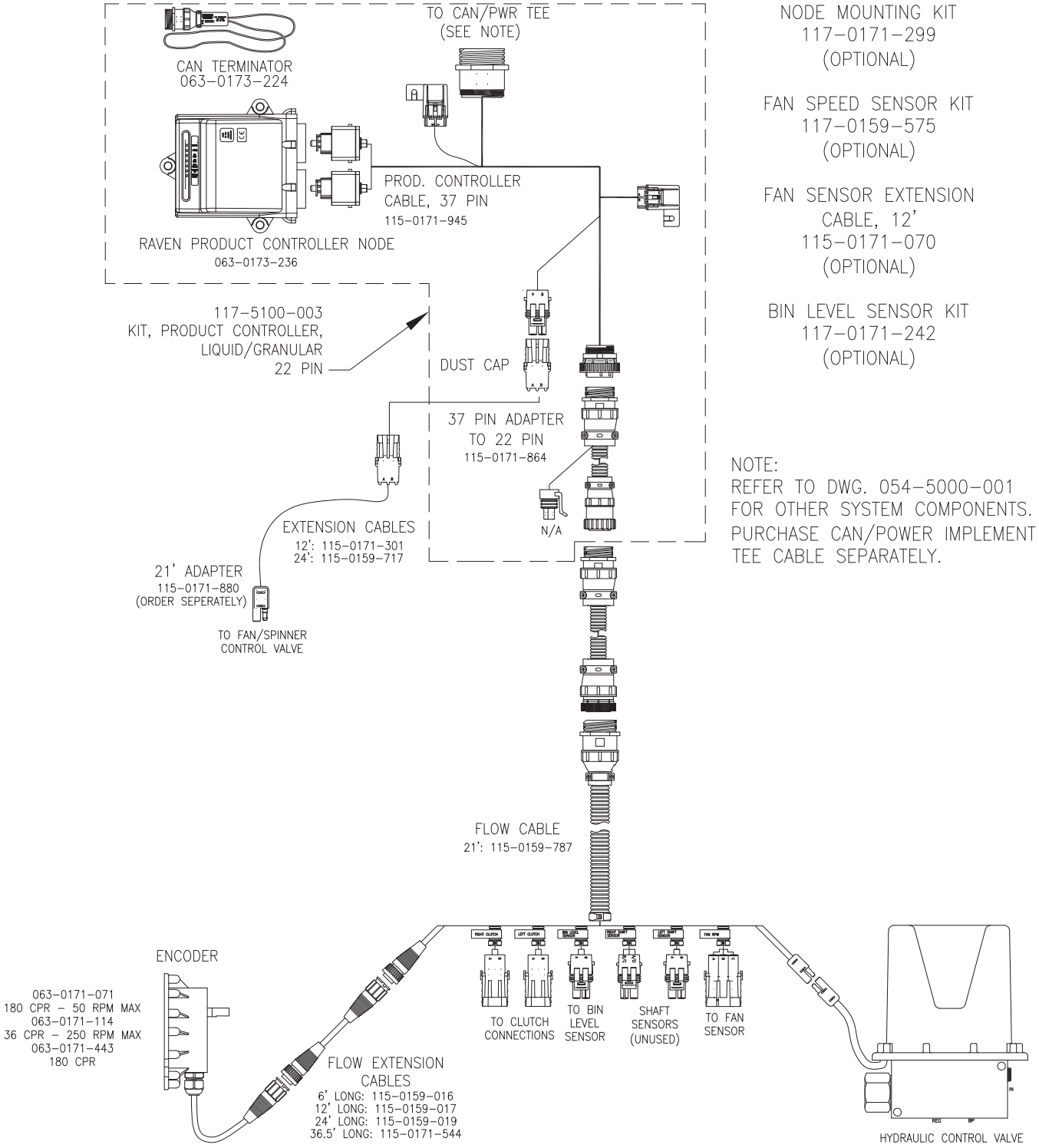
PRODUCT CONTROLLER LIQUID SYSTEM
22 PIN PRODUCT CABLE



RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	JAB	AT	TLH	CRS	MAP	A	054-5100-003

PAGE 1 OF 2

PRODUCT CONTROLLER GRANULAR SYSTEM
22 PIN PRODUCT CABLE



NODE MOUNTING KIT
117-0171-299
(OPTIONAL)

FAN SPEED SENSOR KIT
117-0159-575
(OPTIONAL)

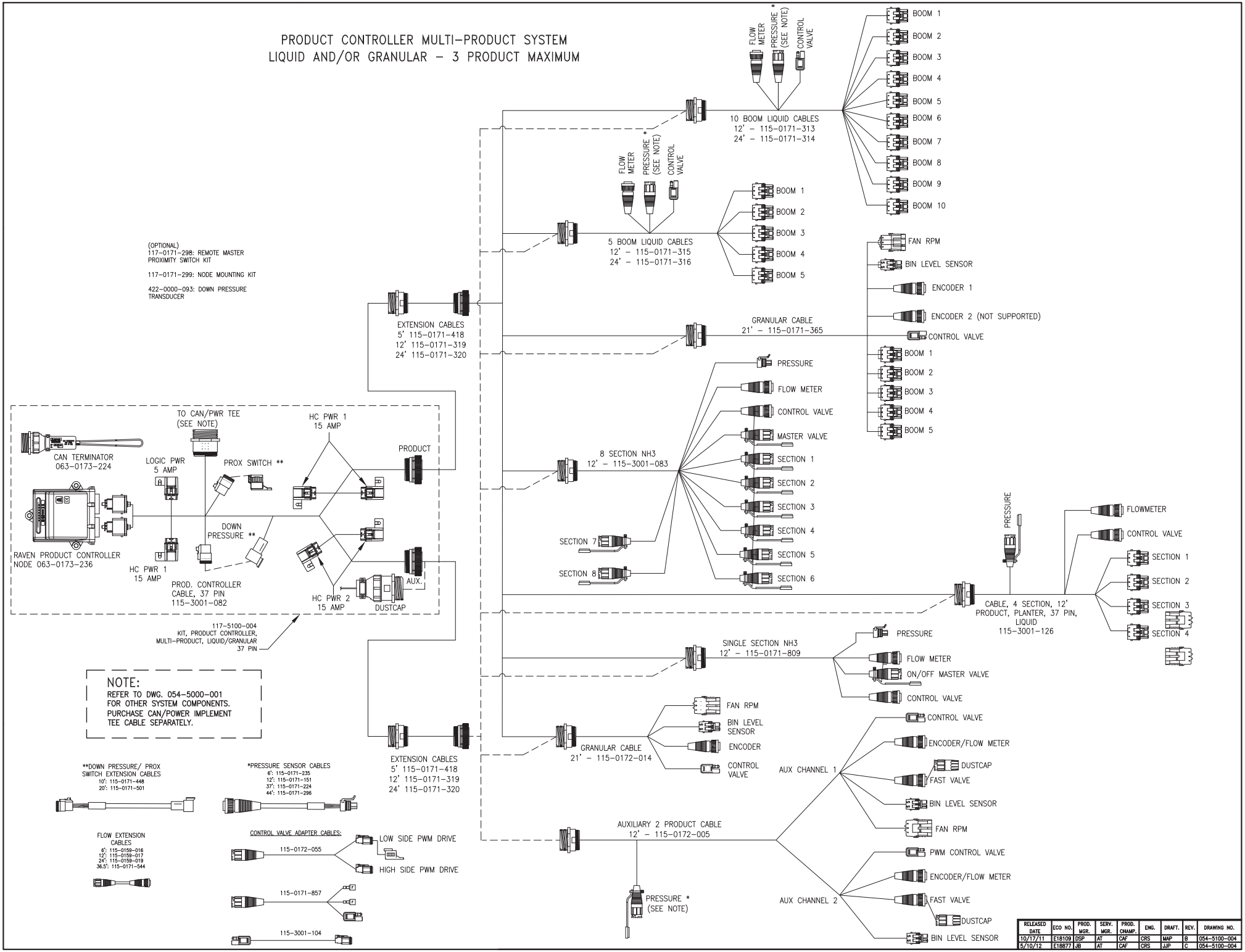
FAN SENSOR EXTENSION
CABLE, 12'
115-0171-070
(OPTIONAL)

BIN LEVEL SENSOR KIT
117-0171-242
(OPTIONAL)

NOTE:
REFER TO DWG. 054-5000-001
FOR OTHER SYSTEM COMPONENTS.
PURCHASE CAN/POWER IMPLEMENT
TEE CABLE SEPARATELY.

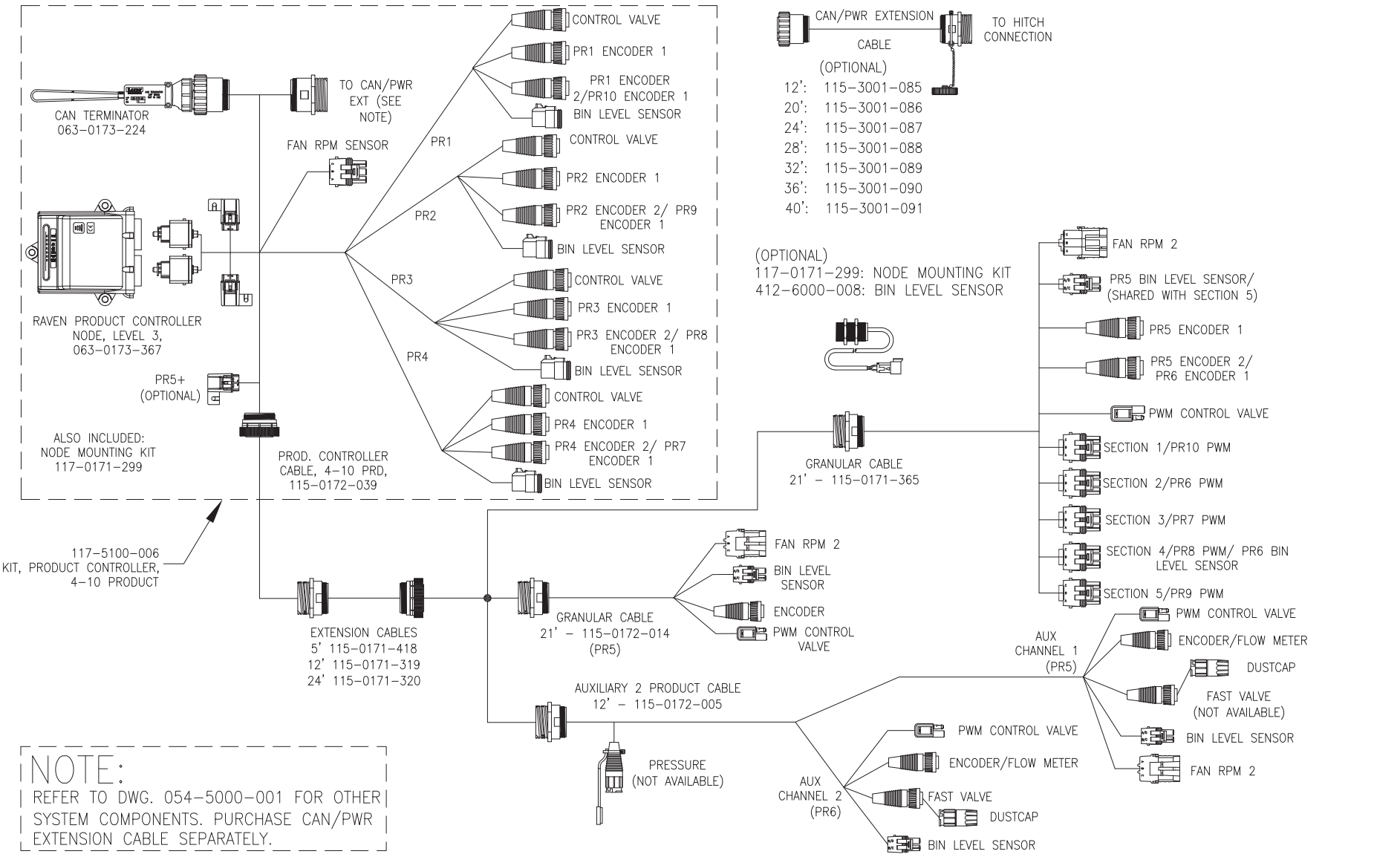
RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	JAB	AT	TLH	CRS	MAP	A	054-5100-003

PRODUCT CONTROLLER MULTI-PRODUCT SYSTEM
LIQUID AND/OR GRANULAR – 3 PRODUCT MAXIMUM



RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CMAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/17/11	E18109	DSP	AT	CAF	CRS	MAP	B	054-5100-004
5/10/12	E18677	JB	AT	CAF	CRS	JJP	C	054-5100-004

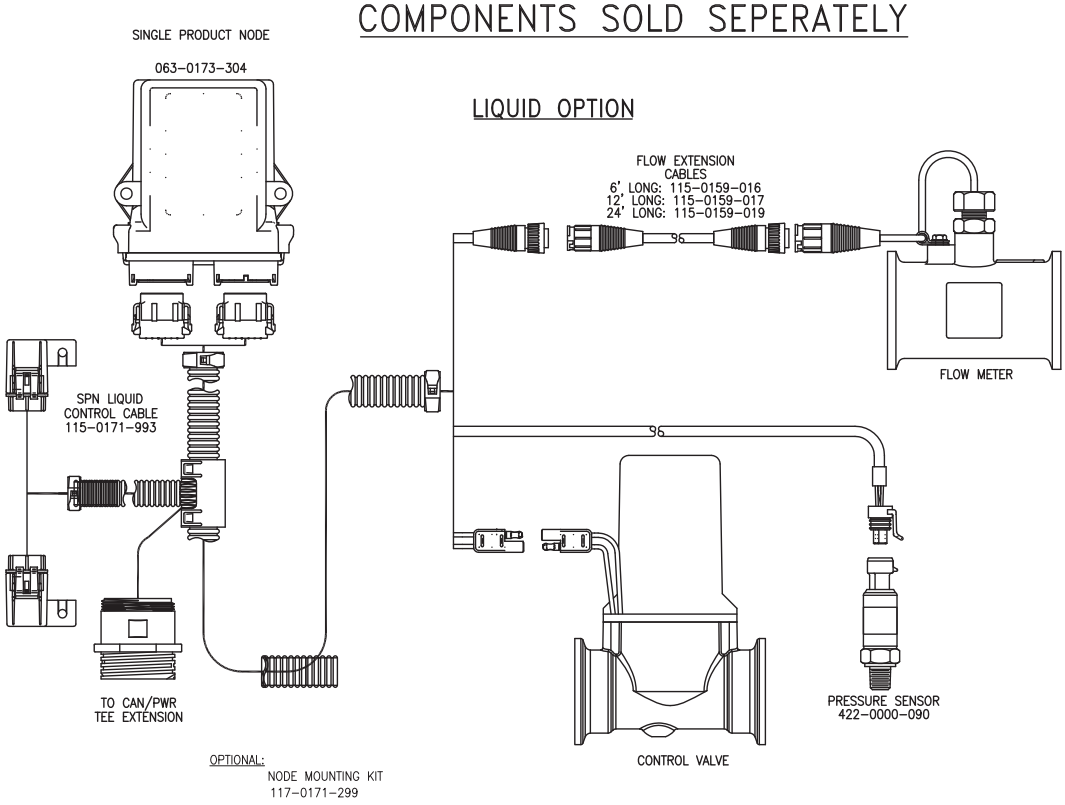
PRODUCT CONTROLLER 4–10 GRANULAR PRODUCT SYSTEM



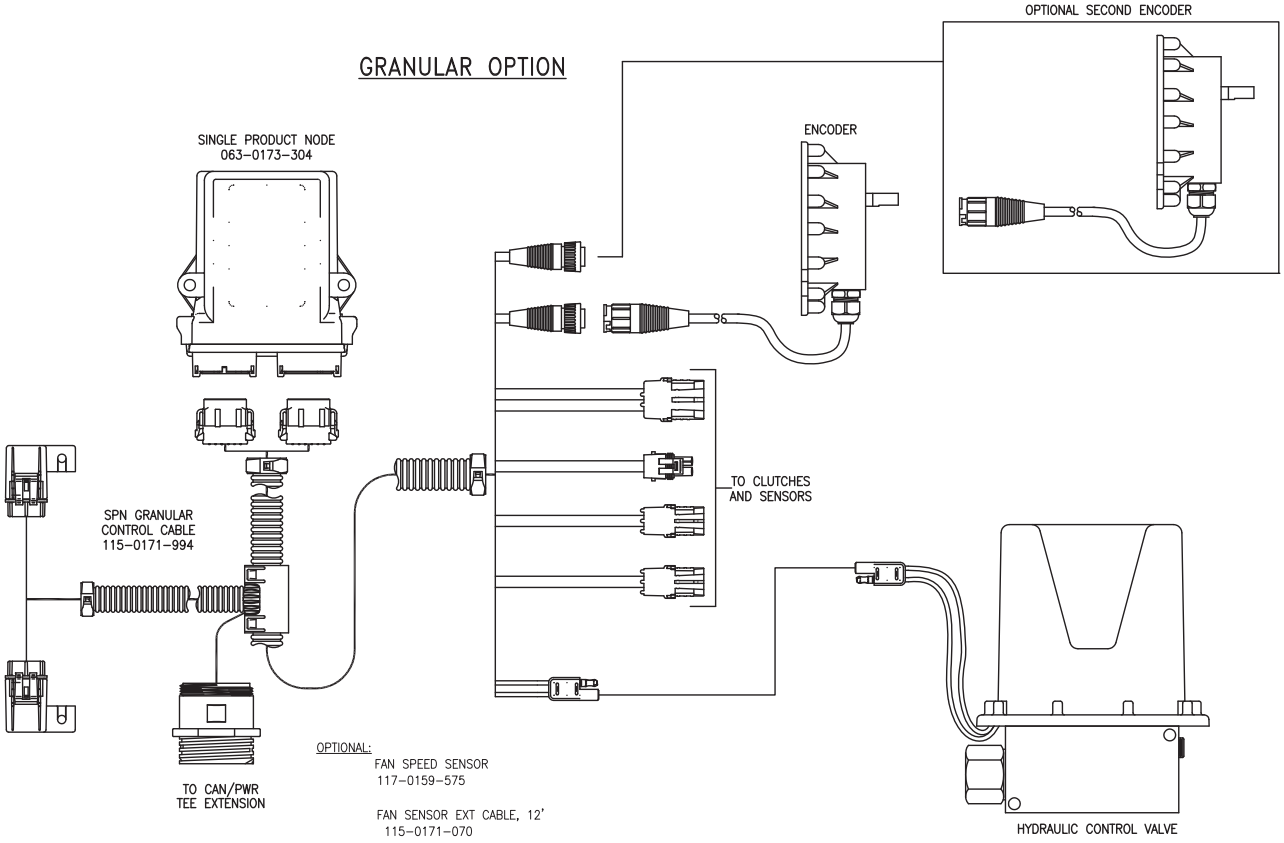
SYSTEM LIMITATIONS:

1. 15 AMPS MAXIMUM CURRENT SOURCED BY THE NODE.
2. PRODUCTS 3–10 SUPPORT PWM OR RAVEN FAST CONTROL VALVES ONLY.
3. NODE LIMITED TO 8 PRODUCTS WHEN USING RAVEN FAST CONTROL VALVES.
4. NODE LIMITED TO 5 PRODUCTS WHEN USING DUAL ENCODERS.
5. NODE LIMITED TO 6 BIN LEVEL INPUTS.

SINGLE PRODUCT NODE, GEN II
COMPONENTS SOLD SEPERATELY



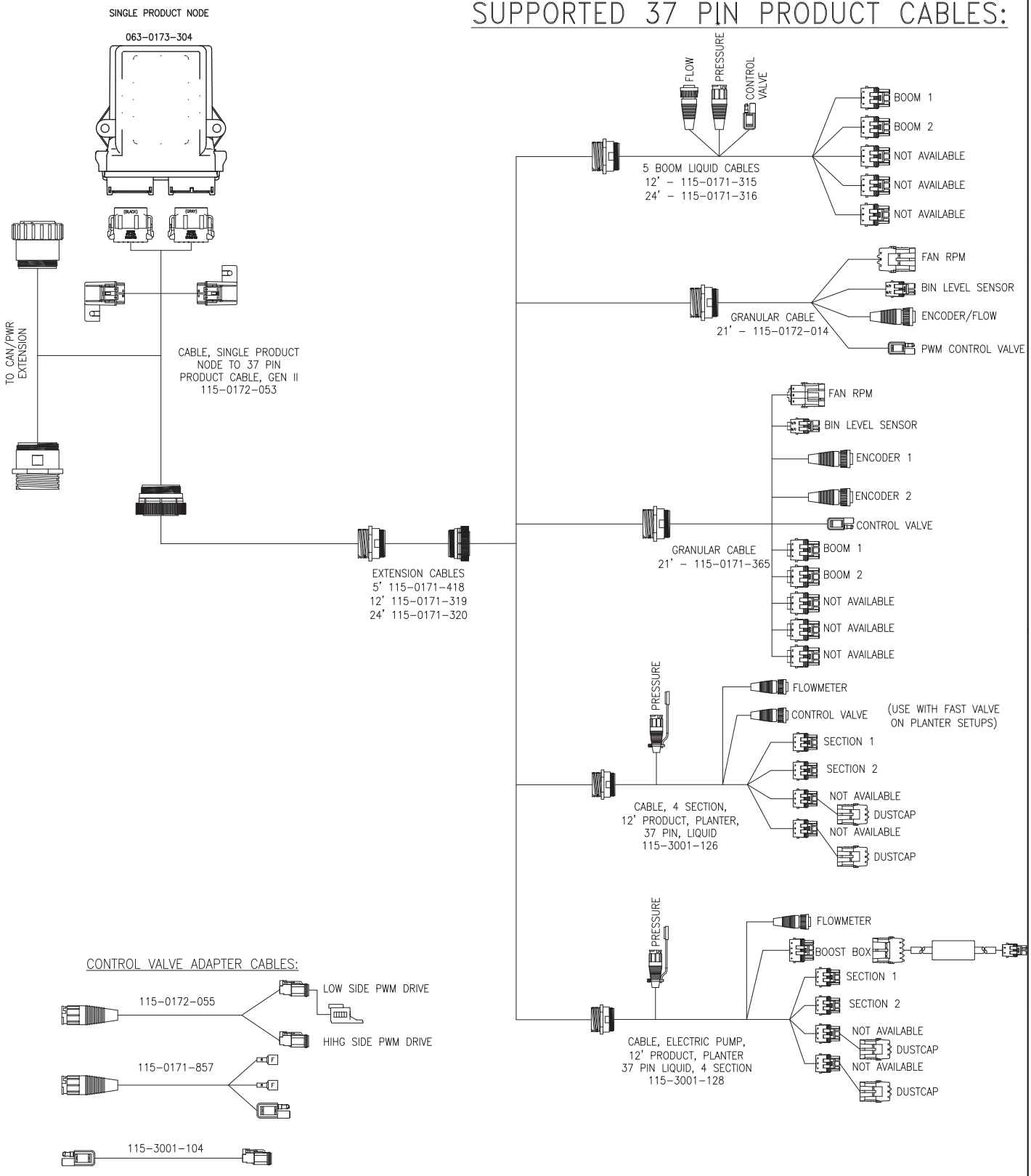
NOTE: REFER TO DWG 054-5000-001 FOR OTHER SYSTEM COMPONENTS.



RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
5/26/11	E17536	JAB	TAC	TLH	CRS	AJK2	A	054-5100-005
	E18910	JAB	AT	CAF	CRS	JJP	B	054-5100-005

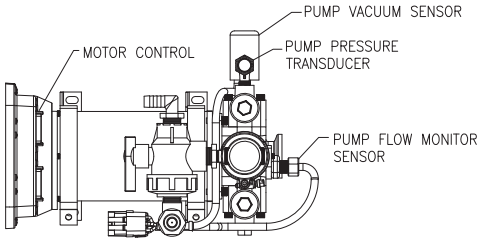
PAGE 1 OF 2

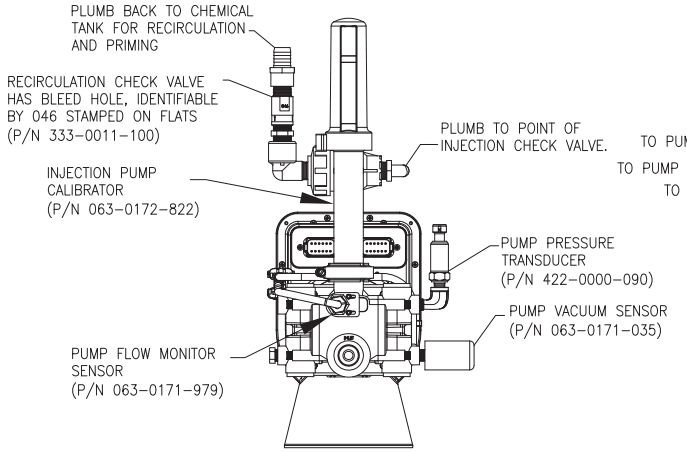
SINGLE PRODUCT 37 PIN PRODUCT CABLE OPTION



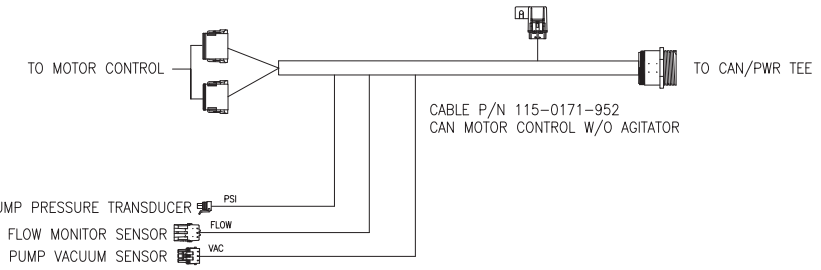
RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
5/26/11	E17536	JAB	TAC	TLH	CRS	AJK2	A	054-5100-005
	E18910	JAB	AT	CAF	CRS	JJP	B	054-5100-005

SIDEKICK PRO, CAN, DIRECT CHEMICAL INJECTION

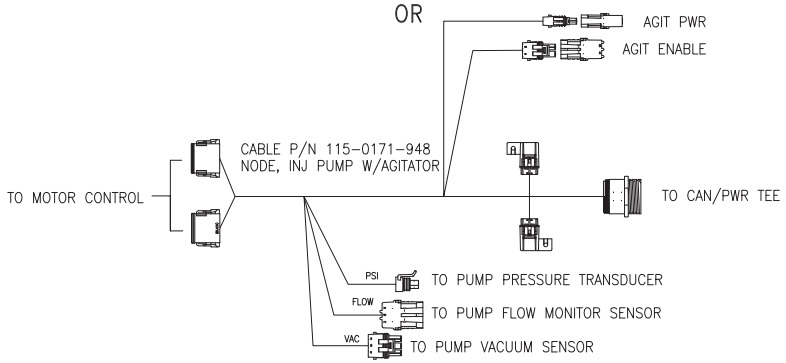



PLUMB BACK TO CHEMICAL TANK FOR RECIRCULATION AND PRIMING
RECIRCULATION CHECK VALVE HAS BLEED HOLE, IDENTIFIABLE BY 046 STAMPED ON FLATS (P/N 333-0011-100)
PLUMB TO POINT OF INJECTION CHECK VALVE.
INJECTION PUMP CALIBRATOR (P/N 063-0172-822)
PUMP PRESSURE TRANSDUCER (P/N 422-0000-090)
PUMP VACUUM SENSOR (P/N 063-0171-035)
PUMP FLOW MONITOR SENSOR (P/N 063-0171-979)

Select One (1) Motor Control Cable for each Pump/Module Kit:



OR



Select Pump/Module Kit:

1) Kit, Injection w/Calibrator, 5-200 oz/min: 063-0173-200

2) Kit, Injection w/Calibrator, 1-40 oz/min: 063-0173-201

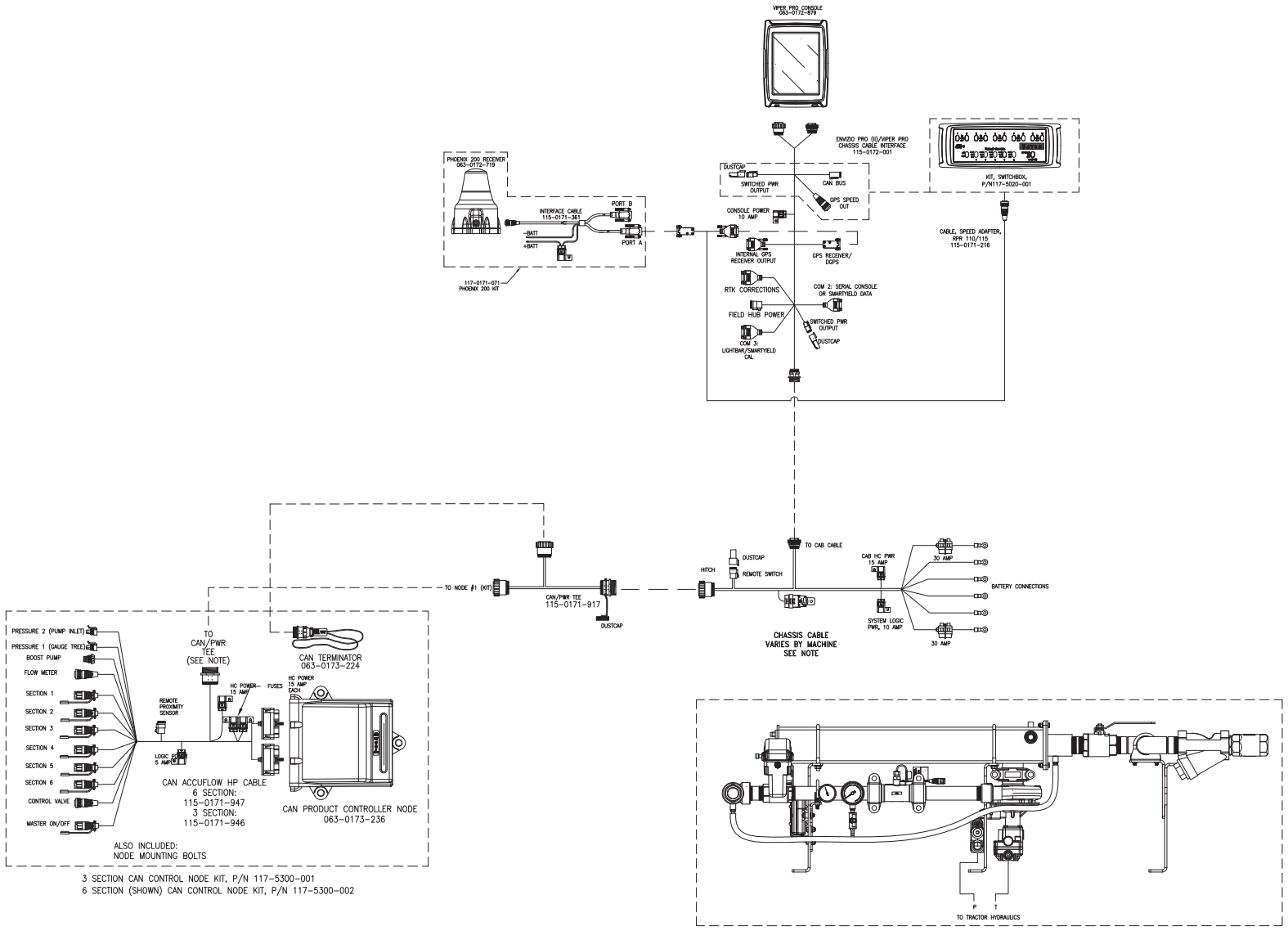
3) Kit, Injection Module w/Calibrator, 24 Gal, 5-200 oz/min: 063-0173-213

4) Kit, Injection Module w/Calibrator, 24 Gal, 1-40 oz/min: 063-0173-212

NOTE:
REFER TO DWG. 054-5000-001 FOR OTHER SYSTEM COMPONENTS.

RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	JAB	AT	GLE	NAP	MAP	A	054-5120-001

ACCUFLOW VORTEX AND HP+ SYSTEM DIAGRAM



NOTE:
REFER TO DWG. 054-5000-001 FOR OTHER SYSTEM COMPONENTS.

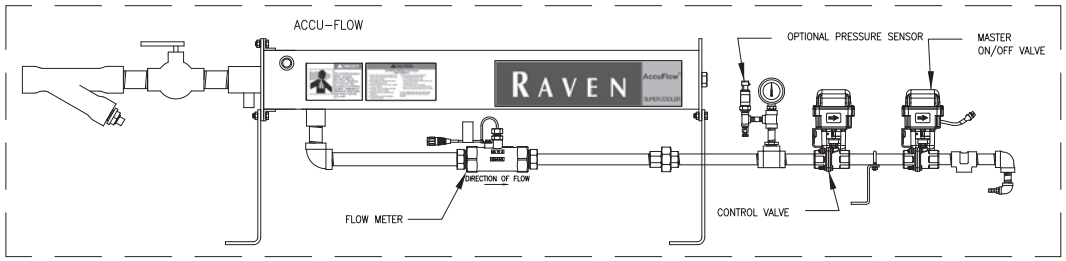
ON/OFF VALVE EXTENSION CABLES: (OPTIONAL)
6': 115-0171-832
12': 115-0171-833
24': 115-0171-834

VAPOR TUBES SOLD SEPERATELY
3/4"- 117-0171-409 (2 TUBE KIT)

RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
1/15/14	E22549	GLE	LLM2	SLL	SSJ	JJP	A	054-5300-004

CAN ACCUFLOW, 6 SECTION BAR

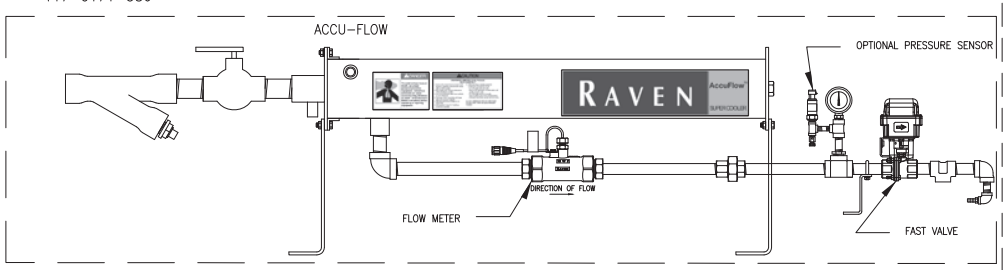
ACCUFLOW KIT, TWO VALVE
117-0171-384
-KIT INCLUDES SPACE SAVER KIT (SHOWN WITHOUT SPACE SAVER KIT)



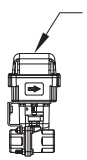
VAPOR TUBES SOLD SEPERATELY
3/4"- 117-0171-409 (2 TUBE KIT)
1/2"- 117-0171-410 (4 TUBE KIT)

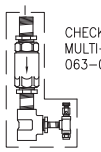
REFER TO SAFETY SECTION IN MANUAL

ACCUFLOW KIT, FAST VALVE
117-0171-386
-KIT INCLUDES SPACE SAVER KIT (SHOWN WITHOUT SPACE SAVER KIT)

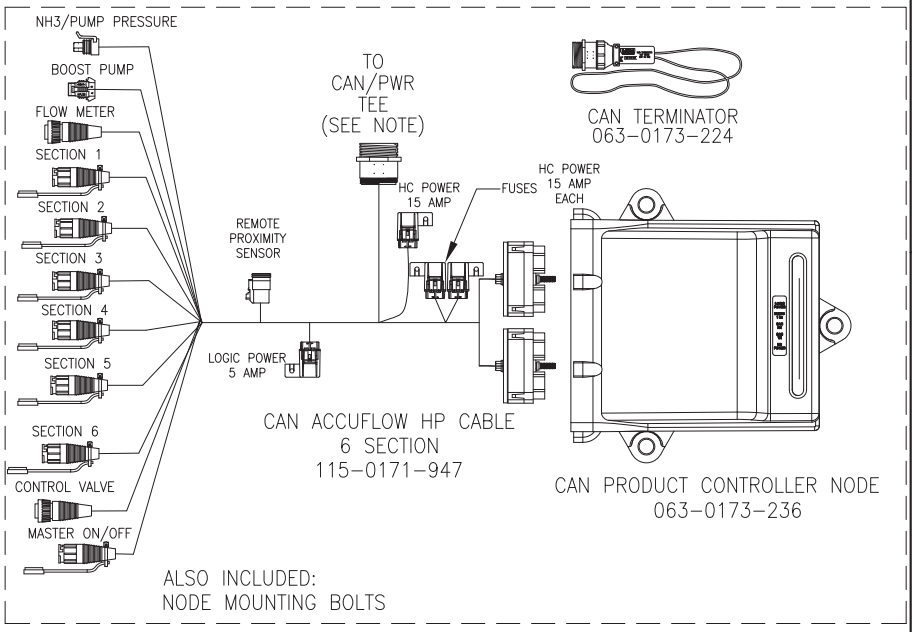


VAPOR TUBES SOLD SEPERATELY
3/4"- 117-0171-409 (2 TUBE KIT)
1/2"- 117-0171-410 (4 TUBE KIT)





CAN ACCUFLOW HP 6 SECTION BAR ELECTRONICS KIT
117-5300-002



ON/OFF VALVE EXTENSION CABLES: (OPTIONAL)
6': 115-0171-832
12': 115-0171-833
24': 115-0171-834

NODE MOUNTING KIT (OPTIONAL): 117-0171-299

NOTE:
REFER TO DWG. 054-5000-001 FOR OTHER SYSTEM COMPONENTS.

Optional:

PROXIMITY SENSOR KIT
117-0171-298

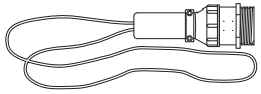
PROX SENSOR EXTENSION CABLE, 20'
115-0171-501

RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	JAB	AT	GLE	CRS	MAP	A	054-5300-002
5/26/11	E17536	JAB	TAC	GLE	CRS	AJK2	B	054-5300-002

PAGE 2 OF 2

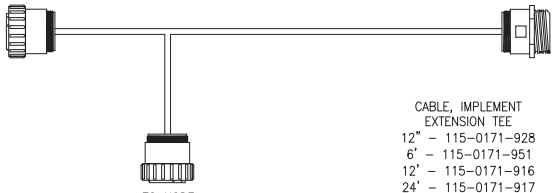
RAVEN GEN II POWERGLIDE PLUS AND ULTRAGLIDE CAN AUTOBOOM

ORDER SEPARATELY IF NOT ORDERING AUTOBOOM CONSOLE KIT, OR IF CAN TERMINATOR NOT BEING MOVED FROM PRODUCT CONTROL NODE OR CHASSIS HARNESS.



CAN TERMINATOR
063-0173-224

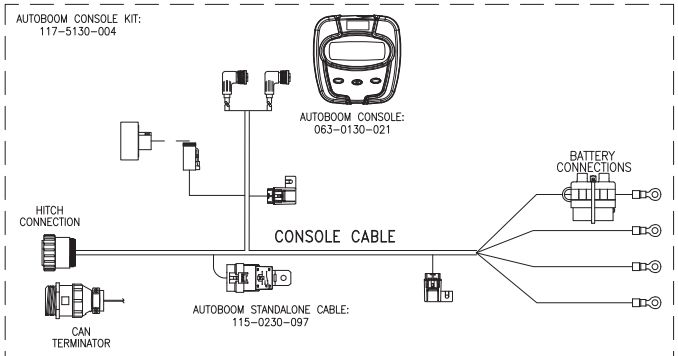
ORDER SEPARATELY, CABLE SHOULD REACH FROM RAVEN AUTOBOOM NODE TO 3' IN FRONT OF HITCH ON PULL-TYPE SPRAYERS, OR TO NEXT NODE CABLE ON SPRAYER.

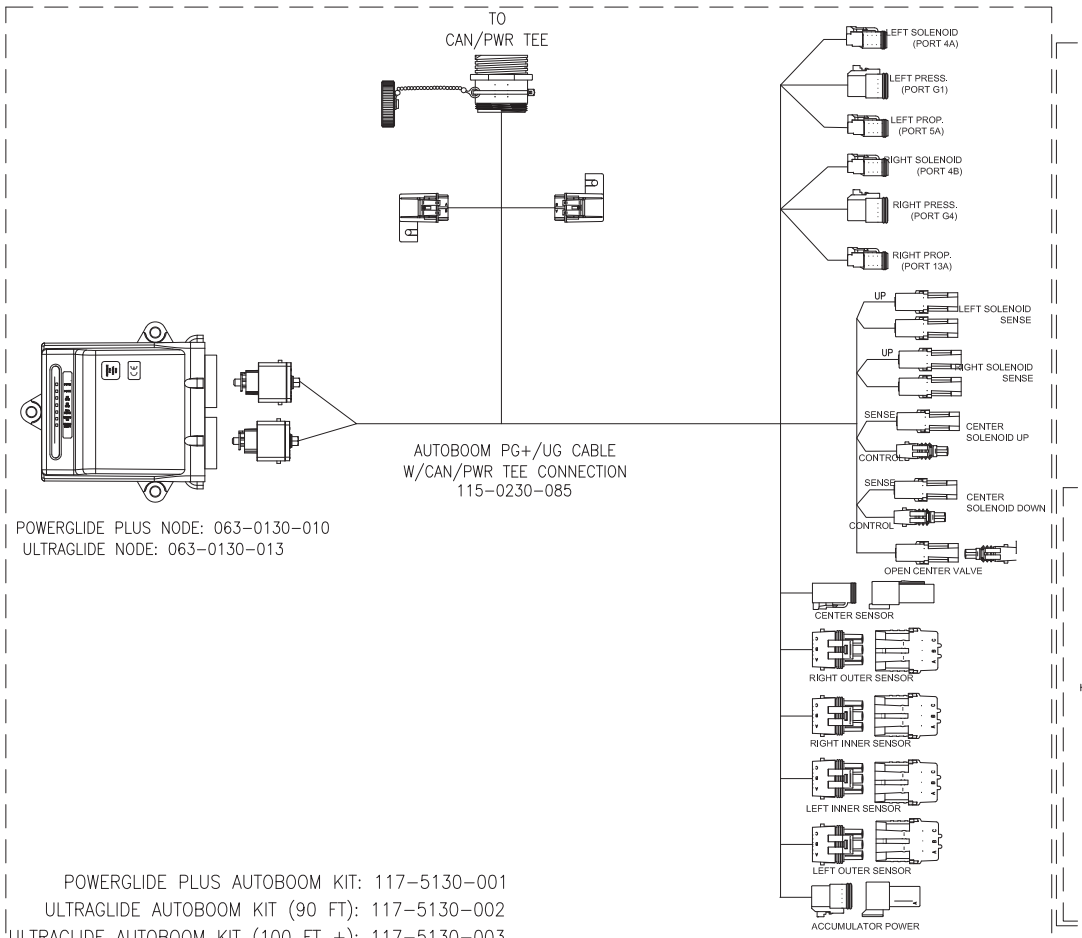


CABLE, IMPLEMENT EXTENSION TEE
12" – 115-0171-928
6' – 115-0171-951
12' – 115-0171-916
24' – 115-0171-917
36' – 115-0171-934

STAND ALONE CAN AUTOBOOM

AUTOBOOM CONSOLE KIT:
117-5130-004



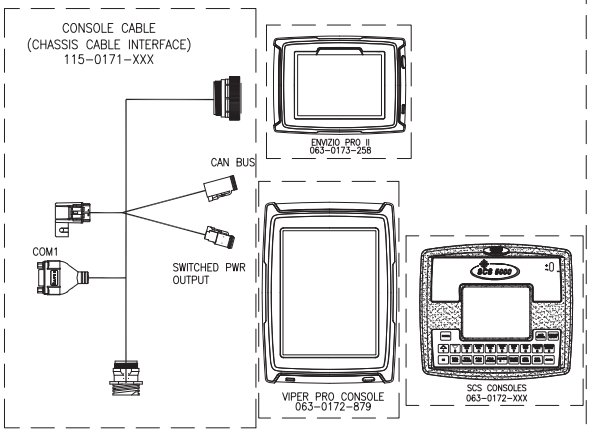


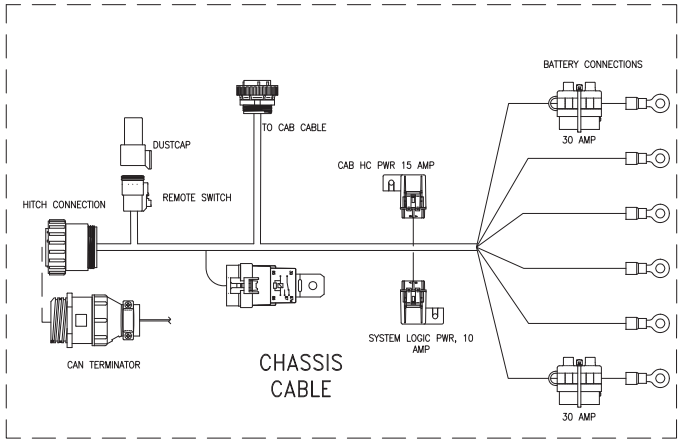
AUTOBOOM PG+/UG CABLE
W/CAN/PWR TEE CONNECTION
115-0230-085

POWERGLIDE PLUS NODE: 063-0130-010
ULTRAGLIDE NODE: 063-0130-013

POWERGLIDE PLUS AUTOBOOM KIT: 117-5130-001
ULTRAGLIDE AUTOBOOM KIT (90 FT): 117-5130-002
ULTRAGLIDE AUTOBOOM KIT (100 FT +): 117-5130-003

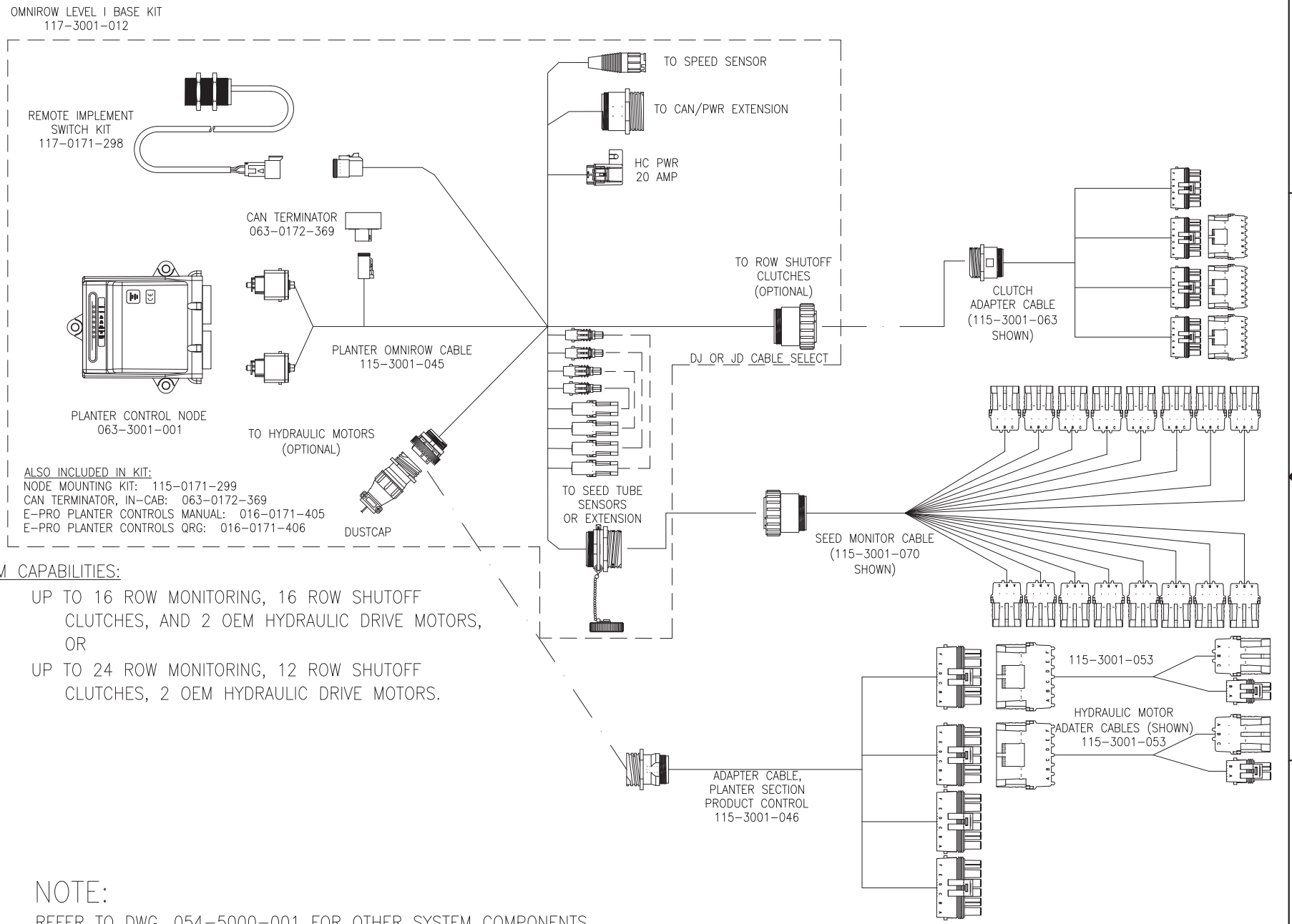
CHASSIS CABLE SYSTEM CAN AUTOBOOM





RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
5/24/11	E17497	BDB	TAC	ADA	NOM	AJK2	A	054-5130-004

OMNIROW LEVEL I SYSTEM



SYSTEM CAPABILITIES:

A) UP TO 16 ROW MONITORING, 16 ROW SHUTOFF CLUTCHES, AND 2 OEM HYDRAULIC DRIVE MOTORS, OR

B) UP TO 24 ROW MONITORING, 12 ROW SHUTOFF CLUTCHES, 2 OEM HYDRAULIC DRIVE MOTORS.

NOTE:

REFER TO DWG. 054-5000-001 FOR OTHER SYSTEM COMPONENTS.

RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
5/23/11	E17536	DSP	TAC	BSG	CRS	AJK2	B	054-3001-012
11/06/13	E21587	DSP	AT	SK	TLH	BJH	C	054-3001-012

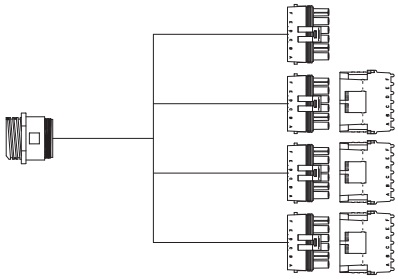
OMNIROW LEVEL I SYSTEM

PURCHASE FOLLOWING SEPARATELY:

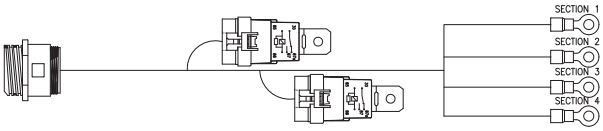
ONE (1) CLUTCH ADAPTER CABLE REQUIRED:

- CLUTCH CONNECTION TO JOHN DEERE ROW COMMAND HARNESS: 115-3001-054 (UP TO 16)
  115-3001-092 (24 ROW)

- CLUTCH CONNECTION TO TRIMBLE/TRU-COUNT CLUTCHES (UP TO 16): 115-3001-063

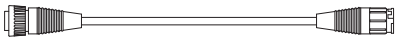


- CLUTCH CONNECTION TO OEM ELECTRIC CLUTCHES (UP TO 4): 115-3001-064



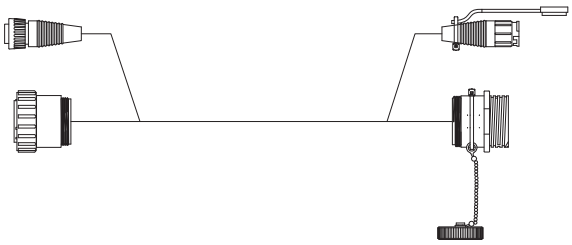
ONE (1) SPEED SENSOR EXTENSION CABLE REQUIRED:

- REFERENCE 054-5000-001 FOR P/N AND LENGTHS
- MEASURE FROM HITCH TO SPEED SENSOR FOR APPROPRIATE LENGTH



ONE (1) CAN/PWR SPEED EXTENSION CABLE REQUIRED:

- MEASURE FROM PLANTER NODE MOUNTING LOCATION TO HITCH FOR APPROPRIATE LENGTH
  - 12': 115-3001-062
  - 20': 115-3001-059
  - 24': 115-3001-042
  - 28': 115-3001-060
  - 32': 115-3001-061
  - 36': 115-3001-044
  - 40': 115-3001-043

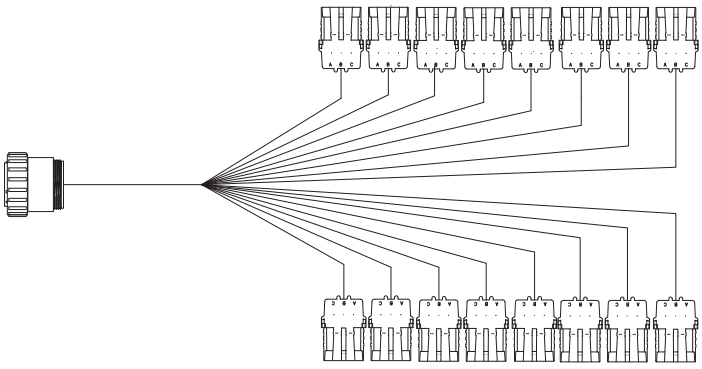


SEED TUBE SENSOR EXTENSION CABLE OPTIONS:

- SEED TUBE SENSOR 37 PIN EXT, 5'
  115-3001-051
- SEED TUBE SENSOR 37 PIN EXT, 20'
  115-3001-052

KINZE PLANTER SEED TUBE SENSOR HARNESS & SENSOR:

- SEED TUBE SENSOR MONITORING, 12 ROW, 30" SPACING: 115-3001-069
- SEED TUBE SENSOR MONITORING, 16 ROW, 30" SPACING: 115-3001-070
- SEED TUBE SENSOR, HIGH RATE:
  422-0000-100

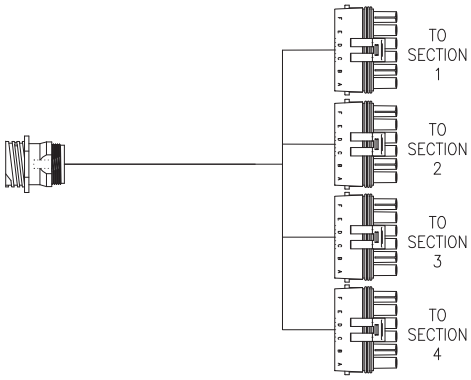


RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
5/23/11	E17536	DSP	TAC	BSG	CRS	AJK2	B	054-3001-012
11/06/13	E21587	DSP	AT	SK	TLH	BJH	C	054-3001-012

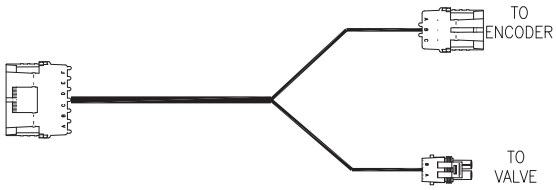
OMNIROW LEVEL I SYSTEM

PURCHASE FOLLOWING SEPARATELY:

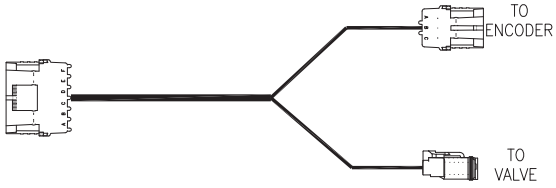
OPTIONAL OEM SECTION CONTROL:
ONE (1) REQUIRED FOR SECTION CONTROL:
– SECTION CONTROL ADAPTER,
16 PIN TO WEATHERPACKS: 115–3001–046



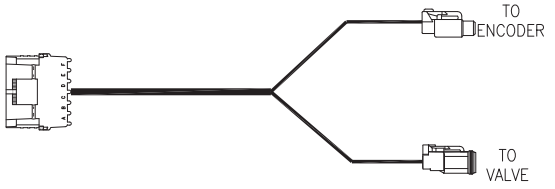
ONE (1) HYDRAULIC MOTOR ADAPTER REQUIRED PER MOTOR:
– JOHN DEERE OR DICKEY JOHN OEM HYDRAULIC MOTOR ADAPTER CABLE:
115–3001–053



– KINZE OEM HYDRAULIC MOTOR ADAPTER CABLE:
115–3001–067



– CASE OEM HYDRAULIC MOTOR ADAPTER CABLE
115–3001–084

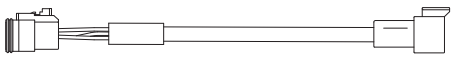


FOR OEM SECTION CONTROL:
– E–PRO PLANTER POPULATION CONTROL
AUTHORIZATION CODE REQUIRED
P/N 077–0180–058

– E–PRO SINGLE PRODUCT VARIABLE RATE CONTROL
AUTHORIZATION CODE OPTIONAL
P/N 077–0180–031

OPTIONAL:
– WIRELESS REMOTE: 063–0173–016

OPTIONAL:
–REMOTE SWITCH EXTENSION CABLES
10': 115–0171–448
20': 115–0171–501

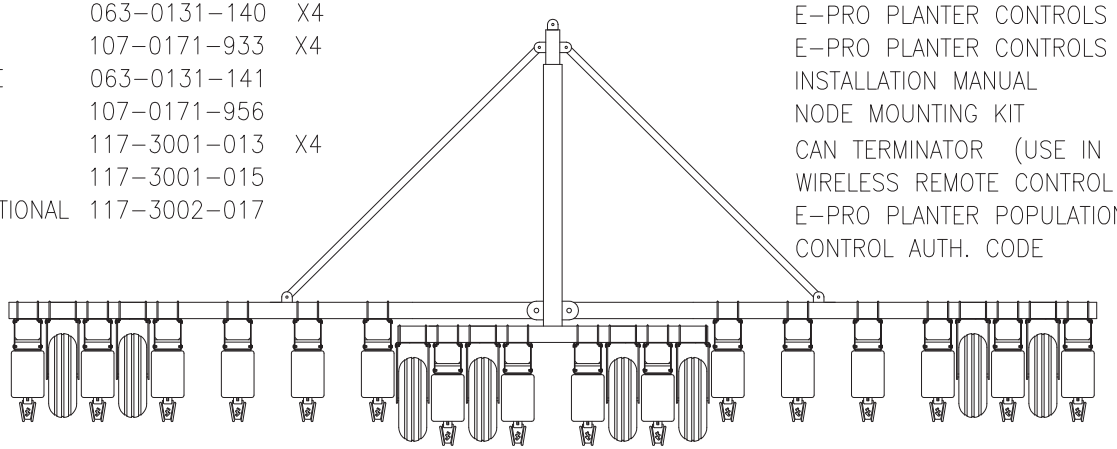


RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
5/23/11	E17536	DSP	TAC	BSG	CRS	AJK2	B	054–3001–012
11/06/13	E21587	DSP	AT	SK	TLH	BJH	C	054–3001–012

TYPICAL OMNIROW LEVEL II SYSTEM
JD1770NT OMNIROW LEVEL II SYSTEM, 16 ROW 30" SPACING, SECTIONAL CONTROL
KIT P/N 117-3J16-024

HYDRAULIC COMPONENTS:

HYDRAULIC MOTOR	416-8000-001	X4
HYDRAULIC VALVE, PWM	063-0131-140	X4
PWM VALVE MOUNTING BRACKET	107-0171-933	X4
HYD. PRESSURE REDUCING VALVE	063-0131-141	
PRR VALVE MOUNTING BRACKET	107-0171-956	
HYD. MOTOR HARDWARE KIT, JD	117-3001-013	X4
PRR HARDWARE KIT, JD	117-3001-015	
HYDRAULIC KIT, JD 1770NT, SECTIONAL	117-3002-017	
ASSORTED HARDWARE		

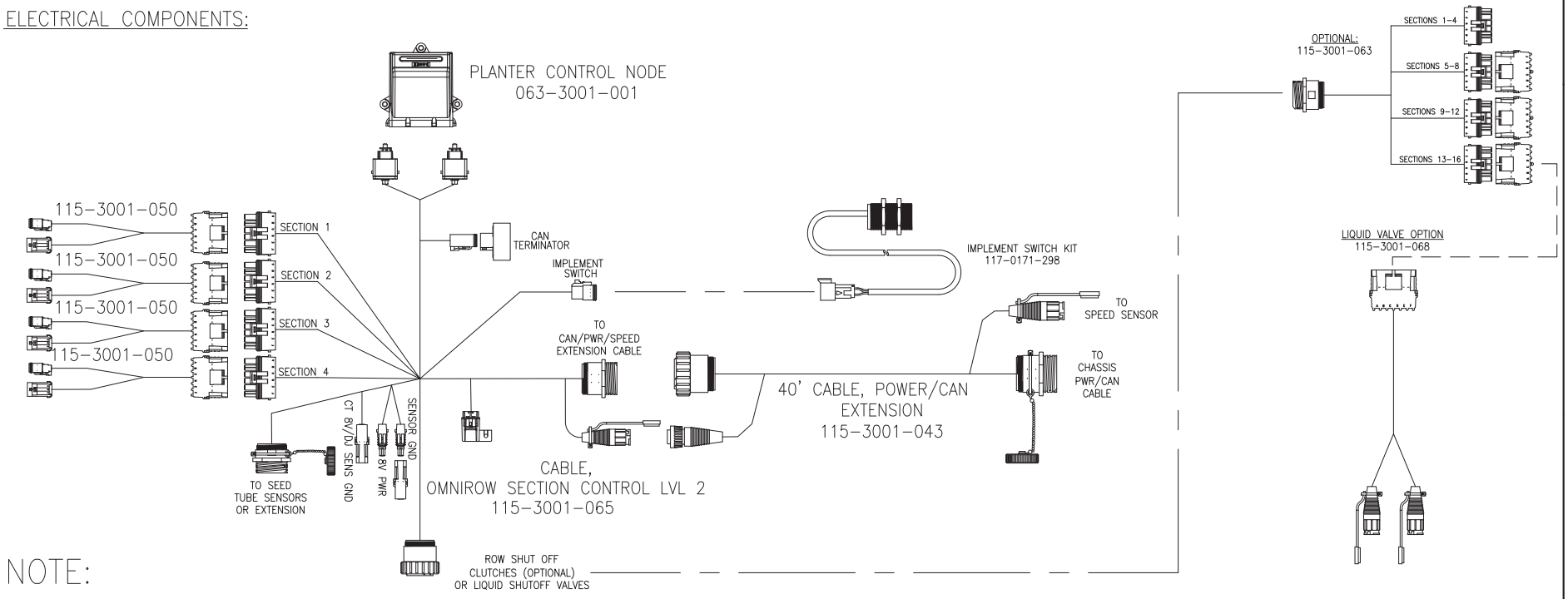


ALSO INCLUDED IN KIT:

E-PRO PLANTER CONTROLS MANUAL	016-0171-405
E-PRO PLANTER CONTROLS QRG	016-0171-406
INSTALLATION MANUAL	016-3001-006
NODE MOUNTING KIT	117-0171-299
CAN TERMINATOR (USE IN CAB)	063-0172-369
WIRELESS REMOTE CONTROL	063-0173-016
E-PRO PLANTER POPULATION CONTROL AUTH. CODE	077-0180-058

OPTIONAL:
EPRO SINGLE PRODUCT VRA AUTH. CODE:
077-0180-031

ELECTRICAL COMPONENTS:



NOTE:
REFER TO DWG. 054-5000-001 FOR OTHER SYSTEM COMPONENTS.

RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16717	DSP	AT	GLE	CRS	MAP	A	054-3J16-024
5/26/11	E17536	DSP	TAC	BSG	CRS	AJK2	B	054-3J16-024

OMNIROW LEVEL III SYSTEM
JD OMNIROW LEVEL III SYSTEM, 4 MOTOR KIT 20"–40" SPACING, MULTIROW CONTROL
KIT P/N 117–3001–052

HYDRAULIC COMPONENTS:

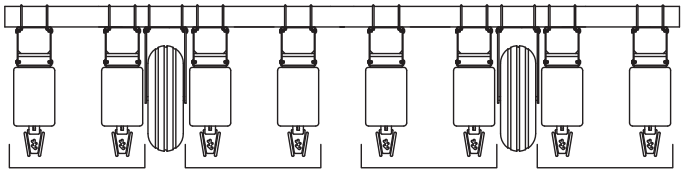
HYDRAULIC MOTOR	416–8000–001	X4
HYDRAULIC VALVE, PWM	063–0131–140	X4
HYD. MOTOR HARDWARE KIT, JD	117–3001–013	X4
HYD. MOTOR MOUNTING BRACKET LH	107–0172–050	X4
HYD. MOTOR MOUNTING BRACKET RH	107–0172–058	X4
HYD. PRESSURE REDUCING VALVE	063–0131–141	
PRR VALVE MOUNTING BRACKET	107–0171–956	
PRR HARDWARE KIT	117–3001–015	
HYDRAULIC KIT, 4 MOTOR	117–3002–085	
HYDRAULIC PRESSURE TEST KIT	117–3001–018	
ASSORTED HARDWARE		

ALSO INCLUDED IN KIT:

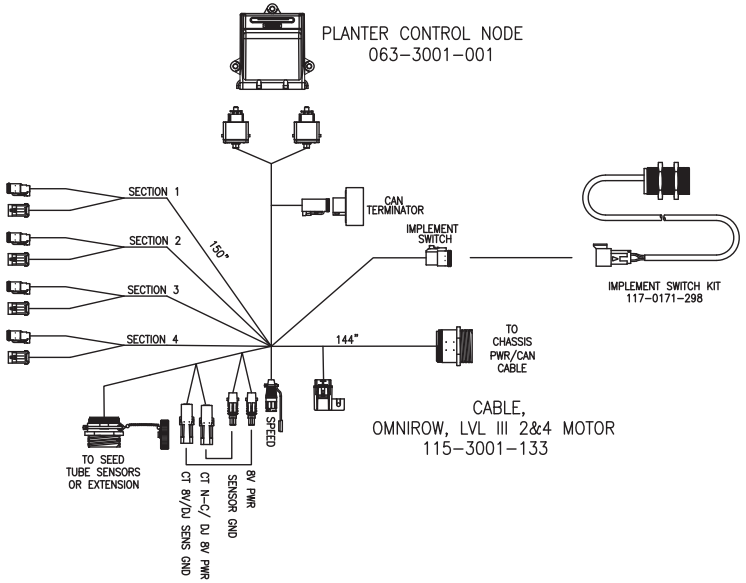
E–PRO PLANTER CONTROLS MANUAL	016–0171–405
E–PRO PLANTER CONTROLS QRG	016–0171–406
INSTALLATION MANUAL	016–3001–005
NODE MOUNTING KIT	117–0171–299
CAN TERMINATOR (USE IN CAB)	063–0172–369
E–PRO PLANTER POPULATION CONTROL AUTH. CODE	077–0180–058

OPTIONAL:

EPRO SINGLE PROD. VRA AUTH. CODE: 077–0180–031



ELECTRICAL COMPONENTS



NOTES:

SEED SENSE
- –USES EXISTING 37 PIN SEED SENSOR CABLE. CONTACT DEALER FOR CABLE OPTIONS.
- –KINZE AND CASE REQUIRE REPLACEMENT HIGH RATE DICKEY JOHN SENSORS IF NOT PRESENT. CONTACT DEALER FOR REPLACEMENT SENSORS.
- –MONITORING FOR UP TO 12 ROWS.

HYDRAULICS
- –4 ROWS PER MOTOR MAX.
- –INCLUDED QTY 3: –8 x 72" PRESSURE, TANK, EXCESS FLOW AND QTY 2: –8 x 48" PRESSURE AND TANK HOSES INTENDED FOR MOUNTED PLANTERS. DRAWN PLANTERS WILL REQUIRE EXTENSIONS.
- –ADDITIONAL HOSES WILL BE REQUIRED TO FINISH INSTALLATION. ESTIMATE 2X DRAWBAR WIDTH OF –8 HOSE TO CONNECT MOTORS TO SUPPLIED HOSES.
- –HOSES TO MEET SAE J517/100R17 SPECIFICATIONS 3000 PSI (207 BAR) MINIMUM WORKING PRESSURE.

CABLING
- –MOTOR SECTION BREAKOUTS 150" EACH. CONTACT DEALER FOR EXTENSION CABLE OPTIONS.
- –CAN/POWER BREAKOUT 144". CAN/POWER/SPEED EXTENSION CABLES MAY BE REQUIRED FOR DRAWN PLANTERS.
- –CABLING DOES NOT SUPPORT CLUTCHES.
- –SPEED EXTENSION CABLE REQUIRED IF EXTERNAL SPEED SOURCE IS USED.

PLANTER FRAME
- –12 ROW MAX.
- –EXISTING SHAFTS WILL NEED TO BE MODIFIED TO DIVIDE PLANTER INTO SECTIONS.

NOTE:

REFER TO DWG. 054–5000–001 FOR OTHER SYSTEM COMPONENTS.

RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
8/22/12	E19797	DSP	AT	GLE	RKM	JJP	A	054–3001–006

TYPICAL OMNIROW LEVEL III SYSTEM
JD1770 OMNIROW LEVEL III SYSTEM, 16 ROW 30" SPACING, MULTIROW
KIT P/N 117-3J16-012

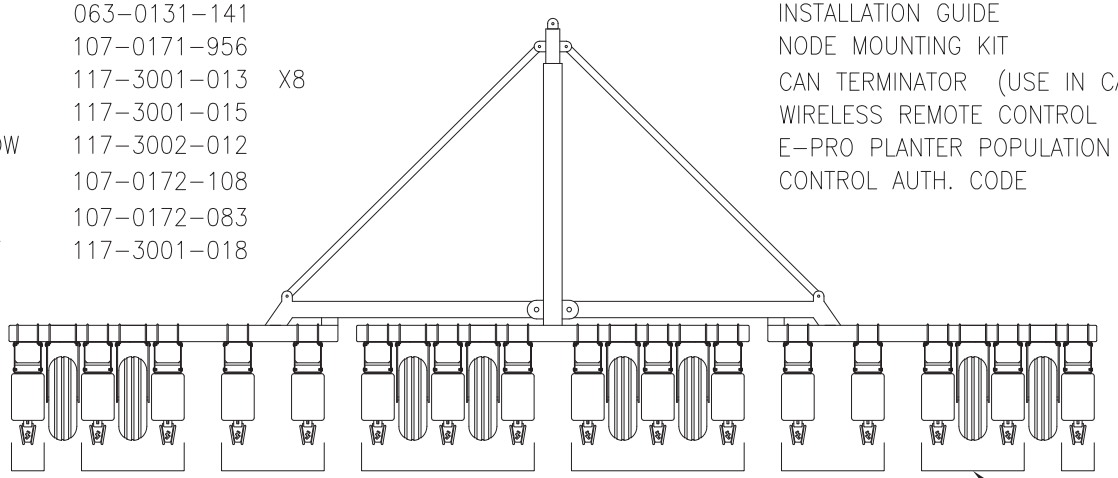
HYDRAULIC COMPONENTS:

HYDRAULIC MOTOR	416-8000-001	X8
HYDRAULIC VALVE, PWM	063-0131-140	X8
MOTOR MOUNTING BRACKET	107-0172-050	X4
MOTOR MOUNTING BRACKET	107-0172-058	X4
HYD. PRESSURE REDUCING VALVE	063-0131-141	
PRR VALVE MOUNTING BRACKET	107-0171-956	
HYD. MOTOR HARDWARE KIT, JD	117-3001-013	X8
PRR HARDWARE KIT, JD	117-3001-015	
HYDRAULIC KIT, JD 1770, MULTIROW	117-3002-012	
HEX ROD, 7/8"	107-0172-108	
COLLAR 7/8" HEX	107-0172-083	
HYDRAULIC PRESSURE TESTING KIT	117-3001-018	
ASSORTED HARDWARE		

ALSO INCLUDED IN KIT:

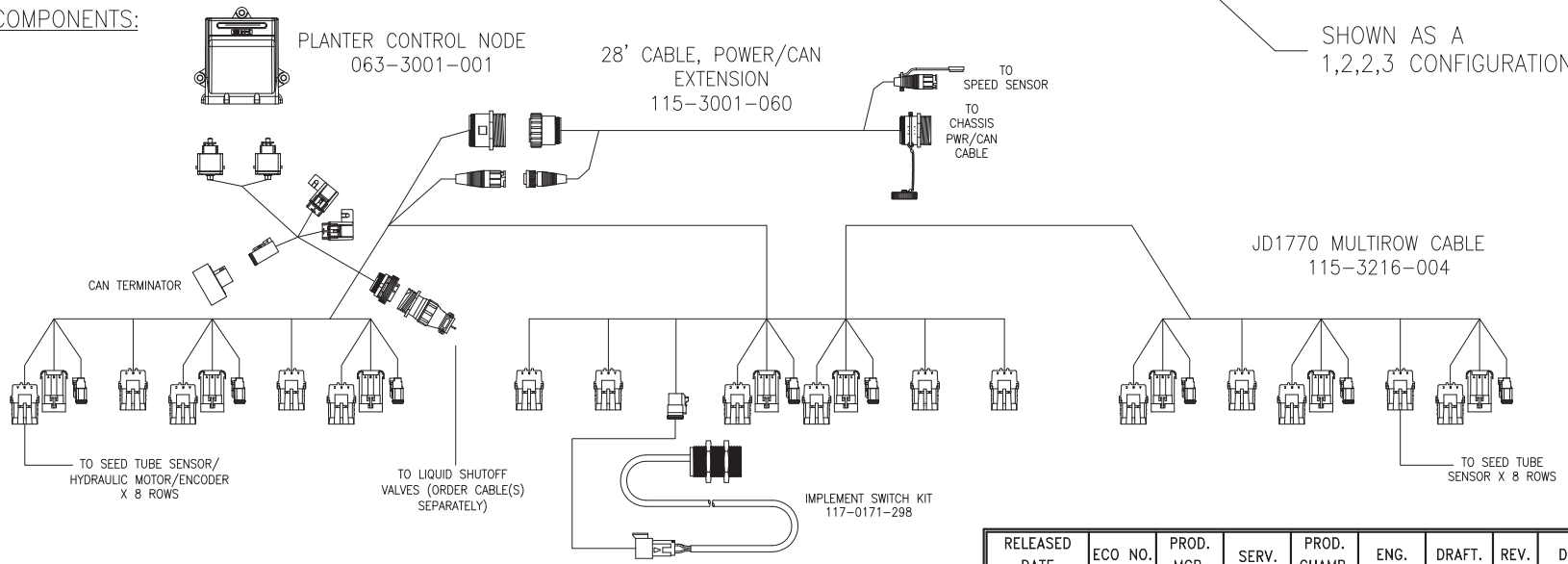
E-PRO PLANTER CONTROLS MANUAL	016-0171-405
E-PRO PLANTER CONTROLS QRG	016-0171-406
INSTALLATION MANUAL	016-3001-005
INSTALLATION GUIDE	016-3001-064
NODE MOUNTING KIT	117-0171-299
CAN TERMINATOR (USE IN CAB)	063-0172-369
WIRELESS REMOTE CONTROL	063-0173-016
E-PRO PLANTER POPULATION CONTROL AUTH. CODE	077-0180-058

OPTIONAL:
EPRO SINGLE PRODUCT VRA AUTH. CODE:
077-0180-031
SECTION CONTROL/ LIQUID SHUTOFF ADAPTER CABLE
115-3001-066



SHOWN AS A 1,2,2,3 CONFIGURATION

ELECTRICAL COMPONENTS:



NOTE:
REFER TO DWG. 054-5000-001 FOR OTHER SYSTEM COMPONENTS.

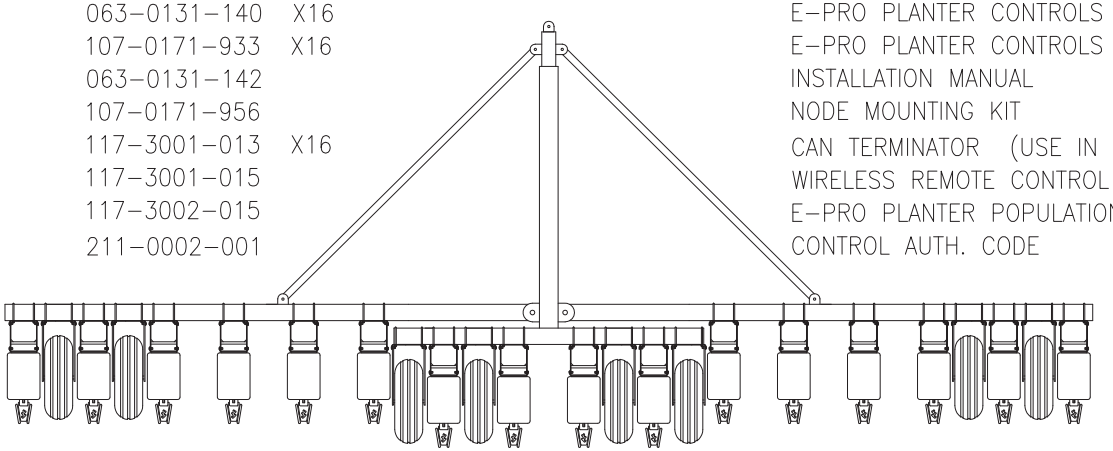
RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
9/20/11	E18141	DSP	TAC	BSG	RKM	JJP	A	054-3J16-025

TYPICAL OMNIROW LEVEL IV SYSTEM

JD1770NT OMNIROW LEVEL IV SYSTEM, 16 ROW 30" SPACING, INDIVIDUAL ROW CONTROL KIT P/N 117-3J16-021

HYDRAULIC COMPONENTS:

HYDRAULIC MOTOR	416-8000-001	X16
HYDRAULIC VALVE, PWM	063-0131-140	X16
PWM VALVE MOUNTING BRACKET	107-0171-933	X16
HYD. PRESSURE REDUCING VALVE	063-0131-142	
PRR VALVE MOUNTING BRACKET	107-0171-956	
HYD. MOTOR HARDWARE KIT, JD	117-3001-013	X16
PRR HARDWARE KIT, JD	117-3001-015	
HYDRAULIC KIT, JD 1770NT, IRC	117-3002-015	
HEX ROD, 7/8" BLACK NYLON	211-0002-001	
ASSORTED HARDWARE		



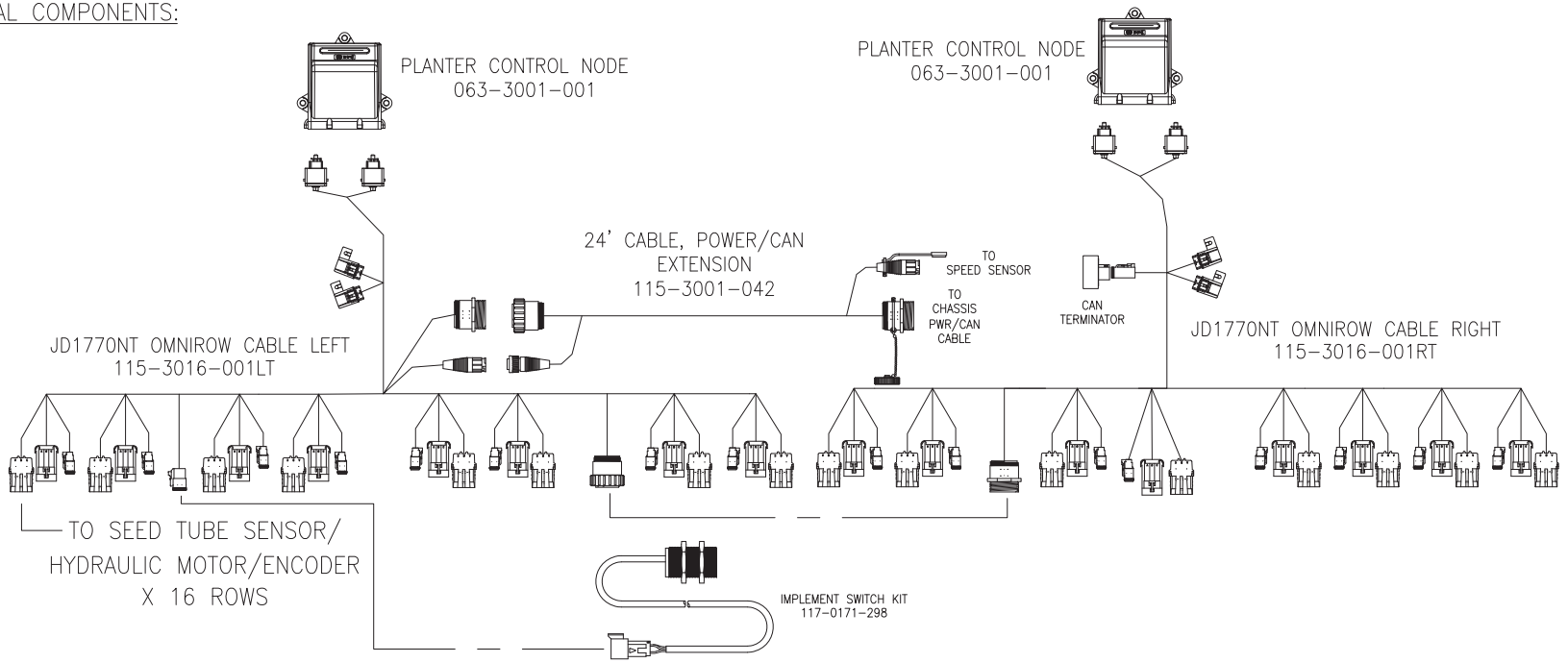
ALSO INCLUDED IN KIT:

E-PRO PLANTER CONTROLS MANUAL	016-0171-405	
E-PRO PLANTER CONTROLS QRG	016-0171-406	
INSTALLATION MANUAL	016-3001-004	
NODE MOUNTING KIT	117-0171-299	X2
CAN TERMINATOR (USE IN CAB)	063-0172-369	
WIRELESS REMOTE CONTROL	063-0173-016	
E-PRO PLANTER POPULATION CONTROL AUTH. CODE	077-0180-058	

OPTIONAL:

EPRO SINGLE PRODUCT VRA AUTH. CODE: 077-0180-031

ELECTRICAL COMPONENTS:

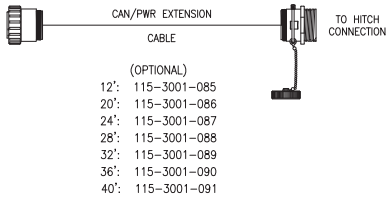


NOTE:

REFER TO DWG. 054-5000-001 FOR OTHER SYSTEM COMPONENTS.

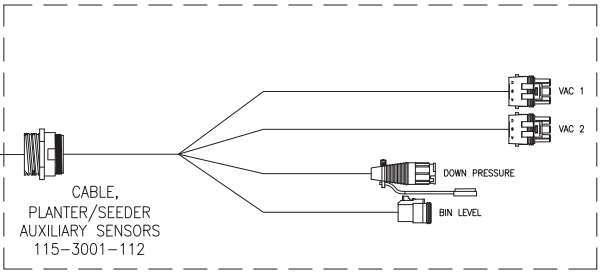
RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
5/26/11	E17536	DSP	TAC	BSG	CRS	AJK2	B	054-3J16-021
5/10/12	E18877	DSP	AT	BSG	CRS	JJP	C	054-3J16-021

PLANTER & SEEDER AUXILIARY MONITORING SYSTEM

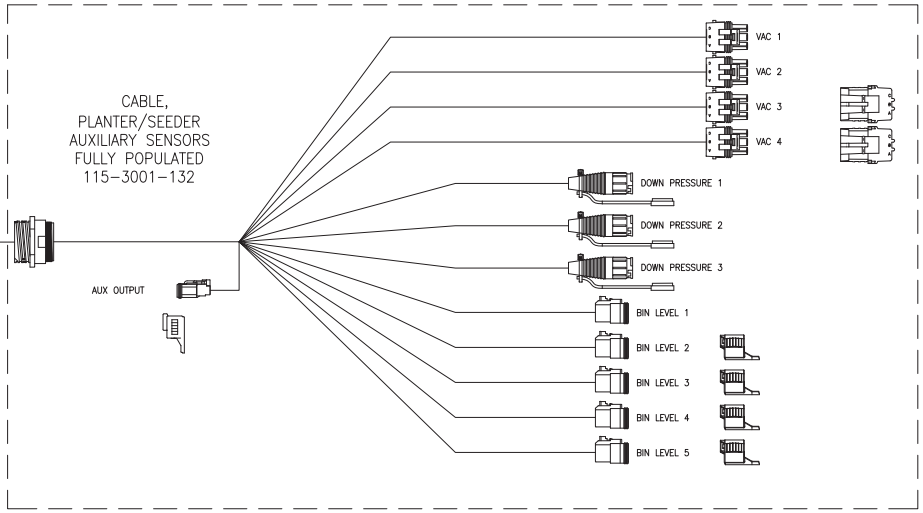


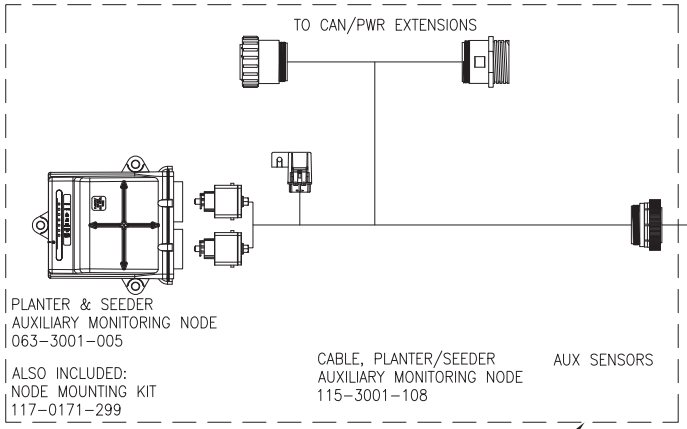
(OPTIONAL)
12': 115-3001-085
20': 115-3001-086
24': 115-3001-087
28': 115-3001-088
32': 115-3001-089
36': 115-3001-090
40': 115-3001-091

OR



CABLE,
PLANTER/SEEDER
AUXILIARY SENSORS
115-3001-112





PLANTER & SEEDER
AUXILIARY MONITORING NODE
063-3001-005

ALSO INCLUDED:
NODE MOUNTING KIT
117-0171-299

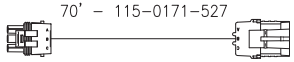
CABLE, PLANTER/SEEDER
AUXILIARY MONITORING NODE
115-3001-108

AUX SENSORS

117-3001-047
KIT, PLANTER & SEEDER
AUXILIARY MONITORING

NOTE:
REFER TO DWG. 054-5000-001
FOR OTHER SYSTEM COMPONENTS.
PURCHASE CAN/POWER IMPLEMENT
EXTENSION CABLE SEPARATELY.

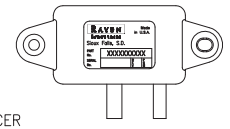
PRESSURE/VAC SENSOR
EXTENSION CABLES
30' – 115-0171-616
42.5' – 115-0171-615
70' – 115-0171-527



VAC/PRESSURE SENSOR KIT
117-3001-045

CABLE, ADAPTER, BIN/AIR,
PRESSURE/VAC
115-3001-123

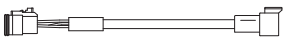
SENSOR, 0-5 PSI,
PRESSURE OR
VACUUM
063-0173-424



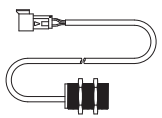
ALSO INCLUDED IN KIT:
063-0173-408 PLATE ASSEMBLY, TRANSDUCER
063-0173-413 ASSEMBLY, TUBING
312-4000-162 NUT, LOCK, NYLON INSERT
321-0000-383 BREATHER
321-0000-384 FITTING, HOSE BARB
321-0000-385 CLAMP, TUBE

AUXILIARY SENSORS & EXTENSION CABLES:

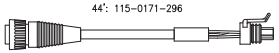
BIN LEVEL
EXTENSION CABLES
10': 115-0171-448
20': 115-0171-501



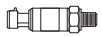
BIN LEVEL SENSOR
412-6000-008



PRESSURE SENSOR CABLES
6': 115-0171-235
12': 115-0171-151
37': 115-0171-224
44': 115-0171-296



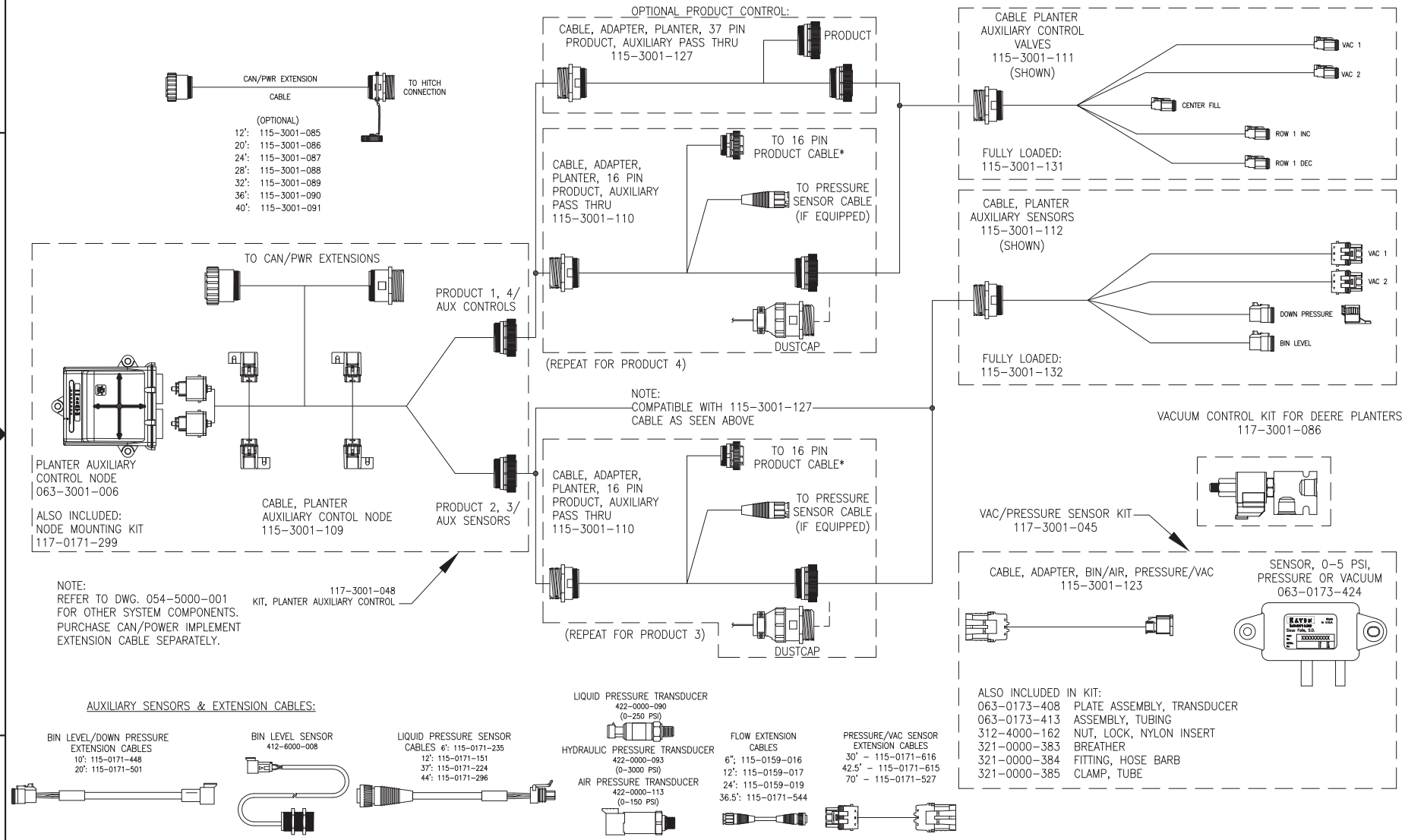
PRESSURE TRANSDUCER
422-0000-090



FLOW EXTENSION
CABLES
6": 115-0159-016
12': 115-0159-017
24': 115-0159-019
36.5': 115-0171-544

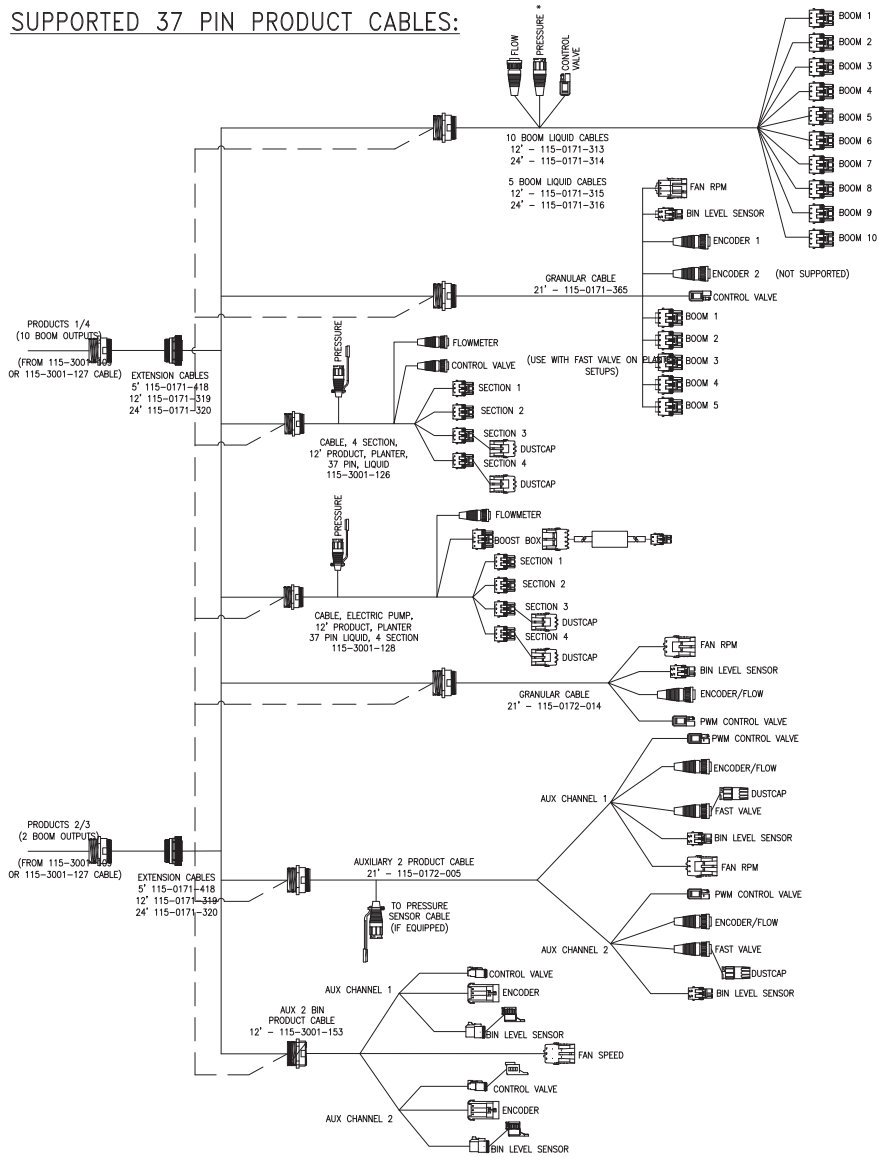
RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
7/31/12	E18910	DSP	AT	BSG	CRS	JJP	A	054-3001-047

PLANTER AUXILIARY CONTROL SYSTEM

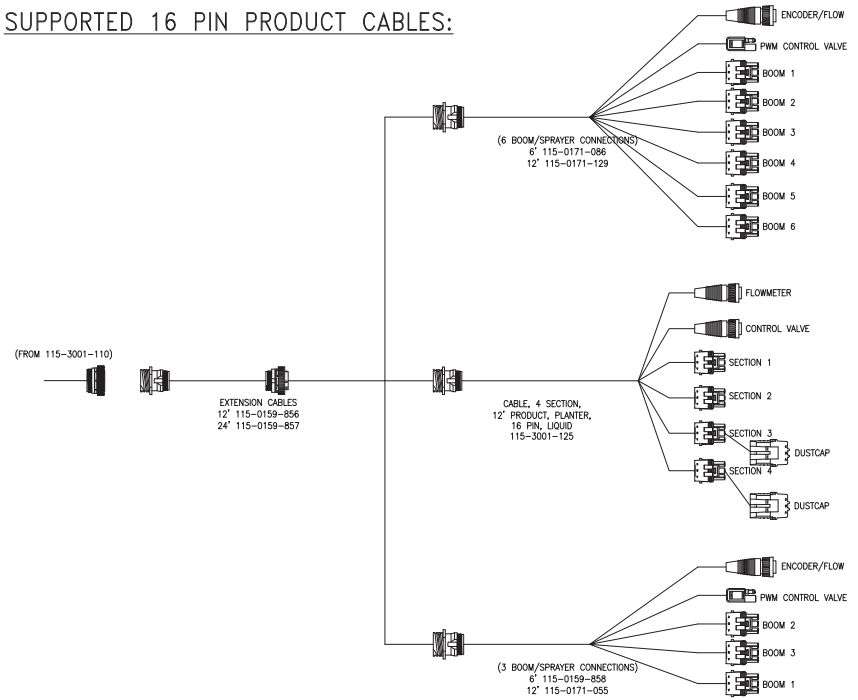

CAN/PWR EXTENSION CABLE
TO HITCH CONNECTION
(OPTIONAL)
12': 115-3001-085
20': 115-3001-086
24': 115-3001-087
28': 115-3001-088
32': 115-3001-089
36': 115-3001-090
40': 115-3001-091
OPTIONAL PRODUCT CONTROL:
CABLE, ADAPTER, PLANTER, 37 PIN PRODUCT, AUXILIARY PASS THRU 115-3001-127
PRODUCT
CABLE PLANTER AUXILIARY CONTROL VALVES 115-3001-111 (SHOWN)
VAC 1
VAC 2
CENTER FILL
ROW 1 INC
ROW 1 DEC
FULLY LOADED: 115-3001-131
CABLE, ADAPTER, PLANTER, 16 PIN PRODUCT, AUXILIARY PASS THRU 115-3001-110
TO 16 PIN PRODUCT CABLE*
TO PRESSURE SENSOR CABLE (IF EQUIPPED)
DUSTCAP
(REPEAT FOR PRODUCT 4)
CABLE, PLANTER AUXILIARY SENSORS 115-3001-112 (SHOWN)
VAC 1
VAC 2
DOWN PRESSURE
BIN LEVEL
FULLY LOADED: 115-3001-132
TO CAN/PWR EXTENSIONS
PRODUCT 1, 4/ AUX CONTROLS
PLANTER AUXILIARY CONTROL NODE 063-3001-006
ALSO INCLUDED: NODE MOUNTING KIT 117-0171-299
CABLE, PLANTER AUXILIARY CONTOL NODE 115-3001-109
PRODUCT 2, 3/ AUX SENSORS
NOTE: COMPATIBLE WITH 115-3001-127 CABLE AS SEEN ABOVE
CABLE, ADAPTER, PLANTER, 16 PIN PRODUCT, AUXILIARY PASS THRU 115-3001-110
TO 16 PIN PRODUCT CABLE*
TO PRESSURE SENSOR CABLE (IF EQUIPPED)
DUSTCAP
(REPEAT FOR PRODUCT 3)
VACUUM CONTROL KIT FOR DEERE PLANTERS 117-3001-086
VAC/PRESSURE SENSOR KIT 117-3001-045
CABLE, ADAPTER, BIN/AIR, PRESSURE/VAC 115-3001-123
SENSOR, 0-5 PSI, PRESSURE OR VACUUM 063-0173-424
ALSO INCLUDED IN KIT:
063-0173-408 PLATE ASSEMBLY, TRANSDUCER
063-0173-413 ASSEMBLY, TUBING
312-4000-162 NUT, LOCK, NYLON INSERT
321-0000-383 BREATHER
321-0000-384 FITTING, HOSE BARB
321-0000-385 CLAMP, TUBE
NOTE: REFER TO DWG. 054-5000-001 FOR OTHER SYSTEM COMPONENTS. PURCHASE CAN/POWER IMPLEMENT EXTENSION CABLE SEPARATELY.
117-3001-048 KIT, PLANTER AUXILIARY CONTROL
AUXILIARY SENSORS & EXTENSION CABLES:
BIN LEVEL/DOWN PRESSURE EXTENSION CABLES 10': 115-0171-448 20': 115-0171-501
BIN LEVEL SENSOR 412-6000-008
LIQUID PRESSURE SENSOR CABLES 6': 115-0171-235 12': 115-0171-151 37': 115-0171-224 44': 115-0171-296
LIQUID PRESSURE TRANSDUCER 422-0000-090 (0-250 PSI)
HYDRAULIC PRESSURE TRANSDUCER 422-0000-093 (0-3000 PSI)
AIR PRESSURE TRANSDUCER 422-0000-113 (0-150 PSI)
FLOW EXTENSION CABLES 6": 115-0159-016 12': 115-0159-017 24': 115-0159-019 36.5': 115-0171-544
PRESSURE/VAC SENSOR EXTENSION CABLES 30' - 115-0171-616 42.5' - 115-0171-615 70' - 115-0171-527

RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
7/31/12	E18910	DSP	AT	BSG	CRS	JJP	A	054-3001-048
3/22/13	E20584	DSP	AT	SK	CRS	AJK2	B	054-3001-048

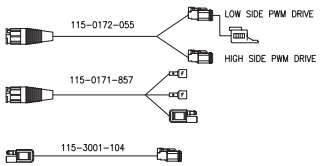
SUPPORTED 37 PIN PRODUCT CABLES:



SUPPORTED 16 PIN PRODUCT CABLES:



CONTROL VALVE ADAPTER CABLES:

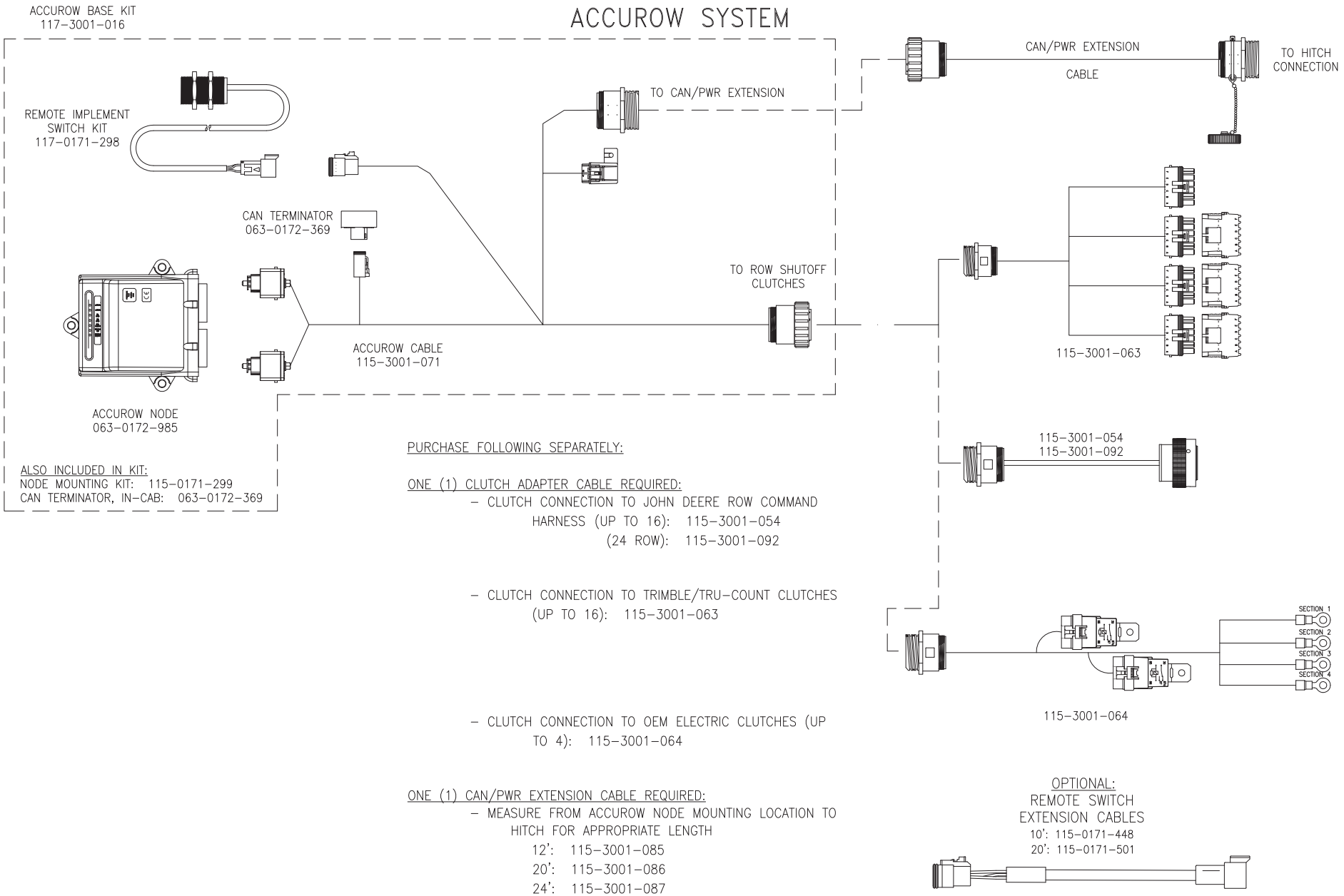


SYSTEM LIMITATIONS:

1. EPRO V3.4 LIMITED TO 4 SECTIONS IN PLANTER MODE.
2. AVAILABLE SECTION VALVE OUTPUTS COMPROMISED AS NUMBER OF AUXILIARY CONTROLS ARE ENABLED

RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
7/31/12	E18910	DSP	AT	BSG	CRS	JJP	A	054-3001-048
3/22/13	E20584	DSP	AT	SK	CRS	AJK2	B	054-3001-048

ACCUROW SYSTEM



ALSO INCLUDED IN KIT:
NODE MOUNTING KIT: 115-0171-299
CAN TERMINATOR, IN-CAB: 063-0172-369

PURCHASE FOLLOWING SEPARATELY:

ONE (1) CLUTCH ADAPTER CABLE REQUIRED:
- CLUTCH CONNECTION TO JOHN DEERE ROW COMMAND HARNESS (UP TO 16): 115-3001-054
  (24 ROW): 115-3001-092
- CLUTCH CONNECTION TO TRIMBLE/TRU-COUNT CLUTCHES (UP TO 16): 115-3001-063
- CLUTCH CONNECTION TO OEM ELECTRIC CLUTCHES (UP TO 4): 115-3001-064

ONE (1) CAN/PWR EXTENSION CABLE REQUIRED:
- MEASURE FROM ACCUROW NODE MOUNTING LOCATION TO HITCH FOR APPROPRIATE LENGTH
  - 12': 115-3001-085
  - 20': 115-3001-086
  - 24': 115-3001-087
  - 28': 115-3001-088
  - 32': 115-3001-089
  - 36': 115-3001-090
  - 40': 115-3001-091

OPTIONAL:
REMOTE SWITCH EXTENSION CABLES
10': 115-0171-448
20': 115-0171-501

NOTE:
REFER TO DWG. 054-5000-001 FOR OTHER SYSTEM COMPONENTS.

RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16721	DSP	AT	GLE	CRS	MAP	A	054-3001-016
5/23/11	E17536	DSP	TAC	BSG	CRS	AJK2	B	054-3001-016

OMNISEED CABLING CONNECTIONS (TOW BEHIND SYSTEM)

AIR CART KITS:

117-3001-035 1 BIN
117-3001-036 2 BIN
117-3001-026 3 BIN

MAJOR COMPONENTS:

VALVE, HYD., OMNIROW, PRESS. REDUCING, OC LOW FLOW: 063-0131-141

VALVE, HYD., PROPORTIONAL FLOW CONTROL 3 WAY: 063-0131-144 (UP TO 3)

TERMINATOR CAN, PASSIVE, 16 PIN AMP: 063-0173-224

NODE, CAN, AIR CART, 5 PRODUCT: 063-3001-007

CODE, AUTHORIZATION, VIPER PRO, GENERIC AIR CART CONTROL: 077-0180-070

CABLE, CART, GENERIC AIR SEEDER: 115-3001-025

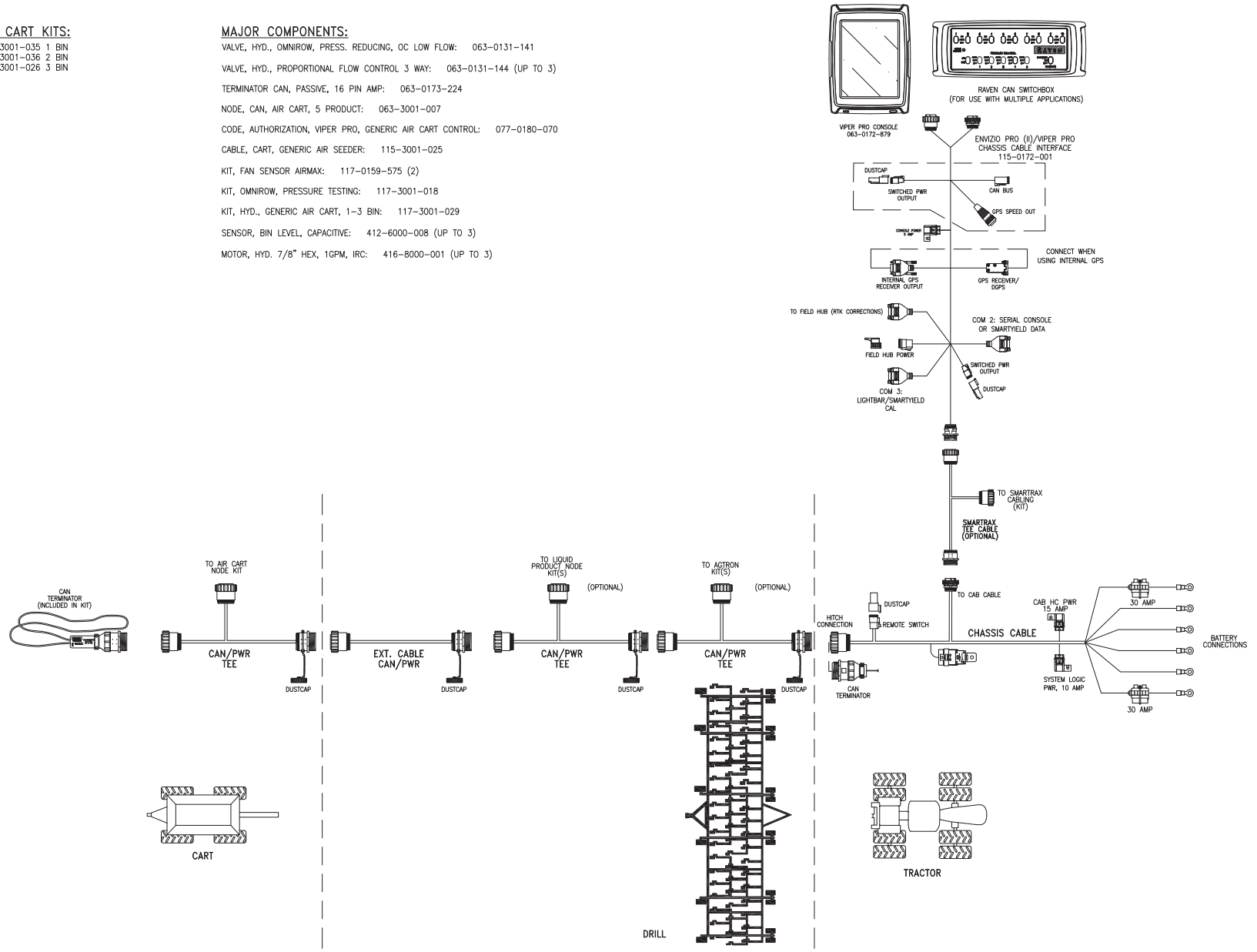
KIT, FAN SENSOR AIRMAX: 117-0159-575 (2)

KIT, OMNIROW, PRESSURE TESTING: 117-3001-018

KIT, HYD., GENERIC AIR CART, 1-3 BIN: 117-3001-029

SENSOR, BIN LEVEL, CAPACITIVE: 412-6000-008 (UP TO 3)

MOTOR, HYD. 7/8" HEX, 1GPM, IRC: 416-8000-001 (UP TO 3)



RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
7/20/11	E17929	DP	AT	SAH	BAD	JJP	A	054-5002-001

OMNISEED CABLING CONNECTIONS (TOW BETWEEN SYSTEM)

AIR CART KITS:
117-3001-035 1 BIN
117-3001-036 2 BIN
117-3001-026 3 BIN

MAJOR COMPONENTS:

VALVE, HYD., OMNIROW, PRESS. REDUCING, OC LOW FLOW: 063-0131-141

VALVE, HYD., PROPORTIONAL FLOW CONTROL 3 WAY: 063-0131-144 (UP TO 3)

TERMINATOR CAN, PASSIVE, 16 PIN AMP: 063-0173-224

NODE, CAN, AIR CART, 5 PRODUCT: 063-3001-007

CODE, AUTHORIZATION, VIPER PRO, GENERIC AIR CART CONTROL: 077-0180-070

CABLE, CART, GENERIC AIR SEEDER: 115-3001-025

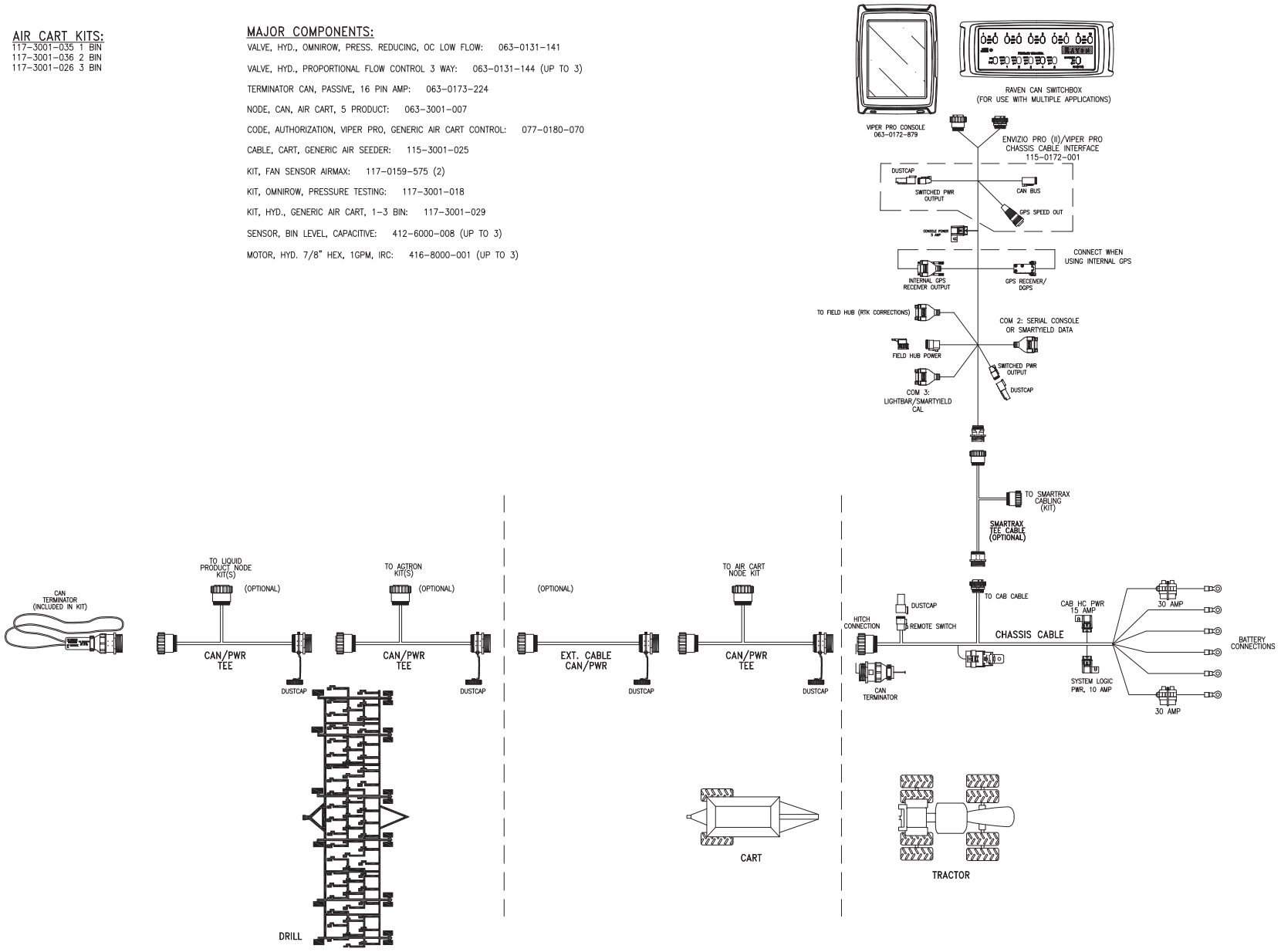
KIT, FAN SENSOR AIRMAX: 117-0159-575 (2)

KIT, OMNIROW, PRESSURE TESTING: 117-3001-018

KIT, HYD., GENERIC AIR CART, 1-3 BIN: 117-3001-029

SENSOR, BIN LEVEL, CAPACITIVE: 412-6000-008 (UP TO 3)

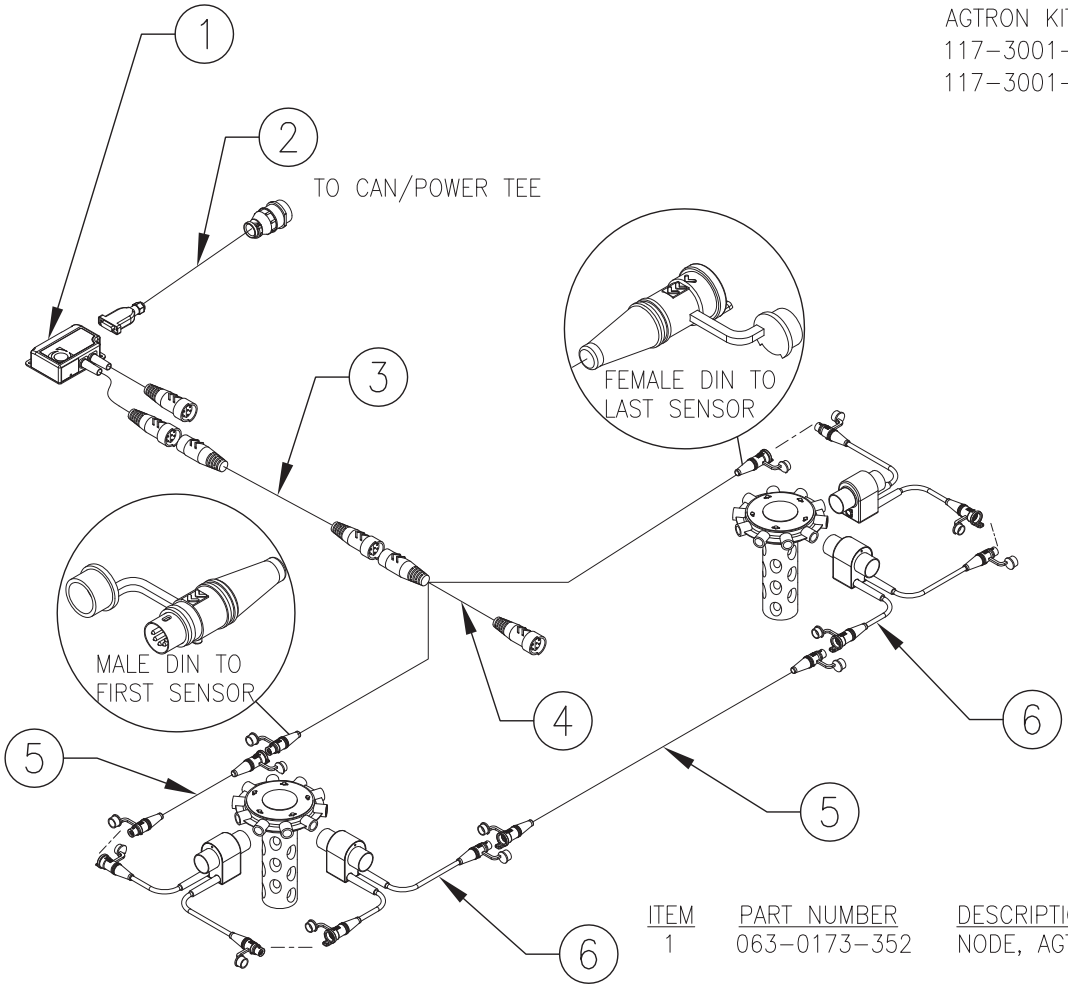
MOTOR, HYD. 7/8" HEX, 1GPM, IRC: 416-8000-001 (UP TO 3)

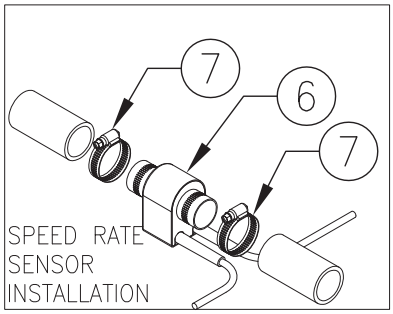


RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
7/20/11	E17929	DP	AT	SAH	BAD	JJP	A	054-5002-001

AGTRON SYSTEM DIAGRAM (LESS THAN 60 SENSORS)

AGTRON KITS:
117-3001-023 (PRIMARY)
117-3001-037 (SECONDARY)



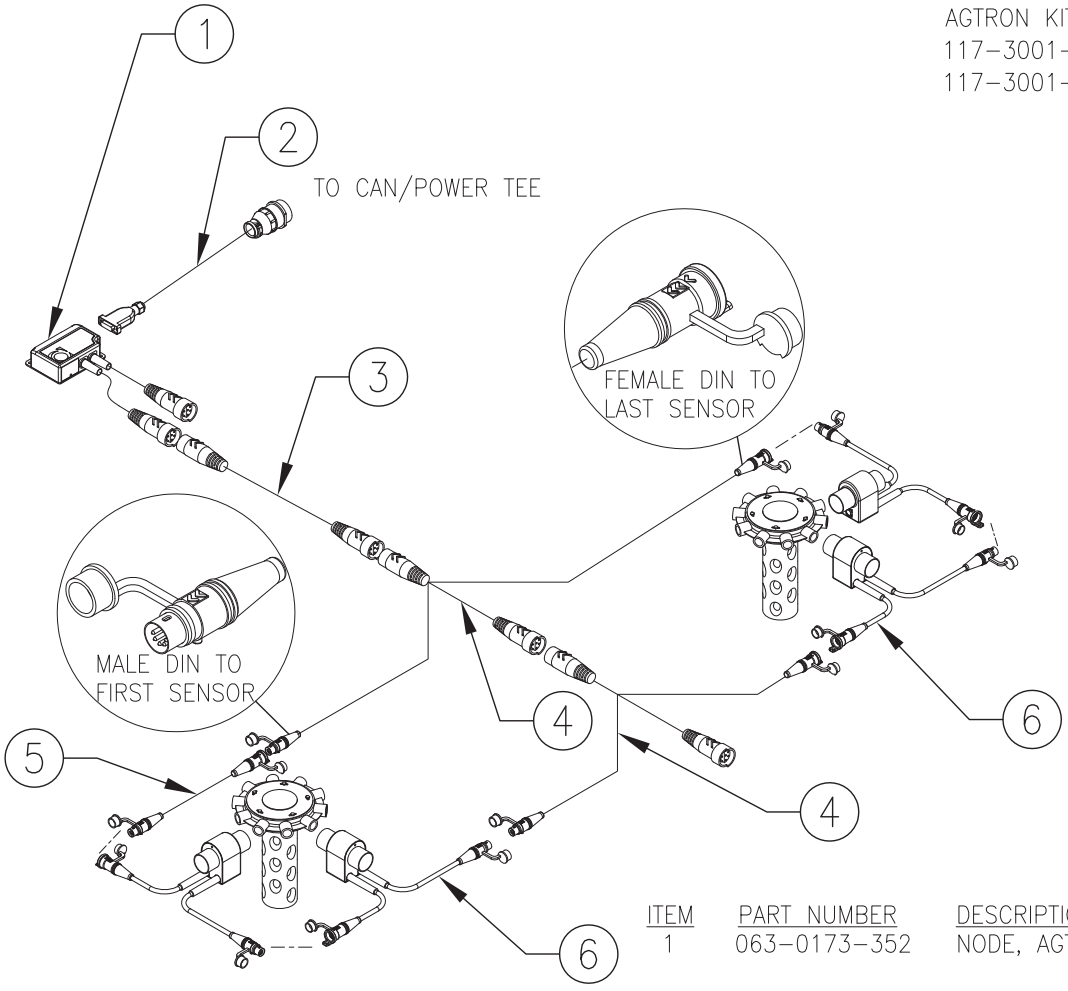


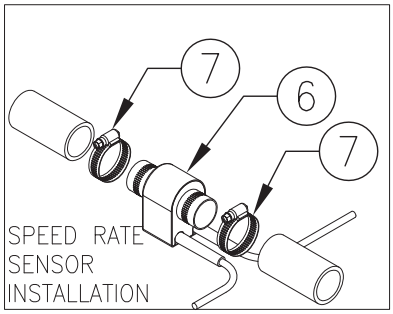
ITEM	PART NUMBER	DESCRIPTION
1	063-0173-352	NODE, AGTRON, BLOCKAGE
2	115-3001-102	CABLE, AGTRON, NODE
3	115-3001-095	CABLE, AGTRON, EXTENSION, 10'
	115-3001-096	CABLE, AGTRON, EXTENSION, 20'
4	115-3001-097	CABLE, AGTRON Y CABLE
5	115-3001-098	CABLE, AGTRON, SENSOR LOOP, 2'
	115-3001-099	CALBE, AGTRON, SENSOR LOOP, 4'
	115-3001-100	CABLE, AGTRON, SENSOR LOOP, 10'
	115-3001-101	CABLE, AGTRON, SENSOR LOOP, 20'
6	422-0000-102	SENSOR, AGTRON, SEED RATE, 1.00"
	422-0000-103	SENSOR, AGTRON, SEED RATE, 1.25"
	422-0000-104	SENSOR, AGTRON, SEED RATE, 7/8"
	422-0000-105	SENSOR, AGTRON, SEED RATE, 15/16"
7	435-3003-004	CLAMPS, WORM DRIVE, HOSE STAINLESS STEEL

RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
8/22/11	E17981	DSP2	AT	BSG	BAD	JJP	A	054-5002-002

AGTRON SYSTEM DIAGRAM (MORE THAN 60 SENSORS)

AGTRON KITS:
117-3001-023 (PRIMARY)
117-3001-037 (SECONDARY)





ITEM	PART NUMBER	DESCRIPTION
1	063-0173-352	NODE, AGTRON, BLOCKAGE
2	115-3001-102	CABLE, AGTRON, NODE
3	115-3001-095	CABLE, AGTRON, EXTENSION, 10'
	115-3001-096	CABLE, AGTRON, EXTENSION, 20'
4	115-3001-097	CABLE, AGTRON Y CABLE
5	115-3001-098	CABLE, AGTRON, SENSOR LOOP, 2'
	115-3001-099	CALBE, AGTRON, SENSOR LOOP, 4'
	115-3001-100	CABLE, AGTRON, SENSOR LOOP, 10'
	115-3001-101	CABLE, AGTRON, SENSOR LOOP, 20'
6	422-0000-102	SENSOR, AGTRON, SEED RATE, 1.00"
	422-0000-103	SENSOR, AGTRON, SEED RATE, 1.25"
	422-0000-104	SENSOR, AGTRON, SEED RATE, 7/8"
	422-0000-105	SENSOR, AGTRON, SEED RATE, 15/16"
7	435-3003-004	CLAMPS, WORM DRIVE, HOSE STAINLESS STEEL

RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
8/22/11	E17981	DSP2	AT	BSG	BAD	JJP	A	054-5002-002

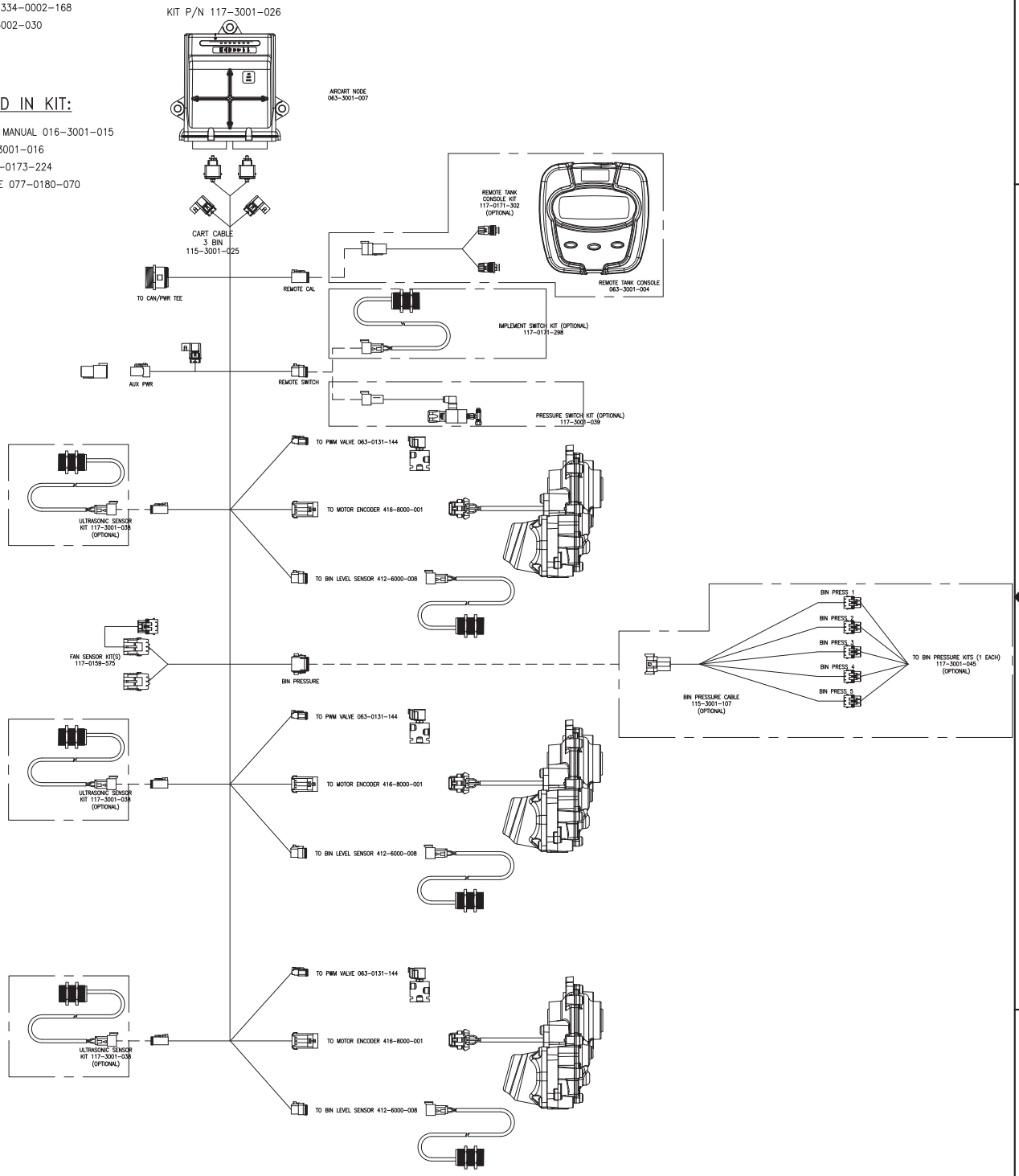
OMNISEED SYSTEM (3 BIN)

HYDRAULIC COMPONENTS:

HYDRAULIC MOTOR 416-8000-001 (UP TO 3)
HYDRAULIC VALVE, PWM. 063-0131-144 (UP TO 3)
HYDRAULIC PRESSURE REDUCING VALVE 063-0131-141
PRR VALVE MOUNTING BRACKET 107-0171-956
PRR HARDWARE KIT 117-3001-015
PRESSURE TEST KIT 117-3001-018
HYDRAULIC MANIFOLD 334-0002-168
HYDRAULIC KIT 117-3002-030

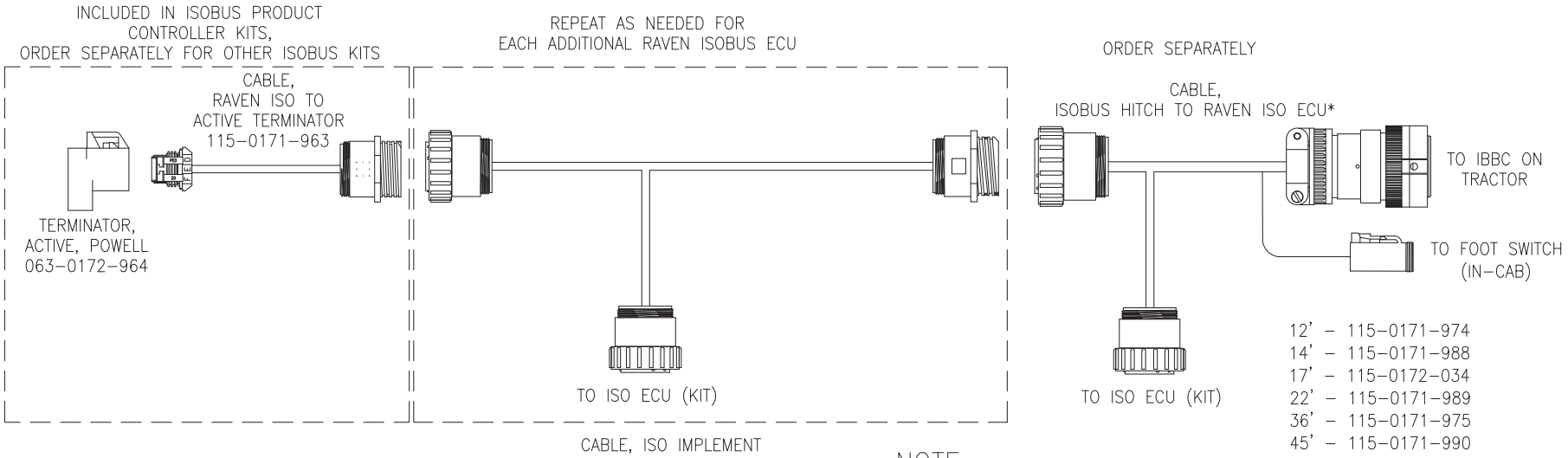
ALSO INCLUDED IN KIT:

OMNISEED OPERATION MANUAL 016-3001-015
OMNISEED QRG 016-3001-016
CAN TERMINATOR 063-0173-224
OMNISEED AUTH. CODE 077-0180-070
ASSORTED HARDWARE



RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
8/30/11	E18184	DSP2	AT	BSG	BAD	JJP	A	054-3001-026
12/7/11	E18839	DSP2	AT	BSG	BAD	JJP	B	054-3001-026

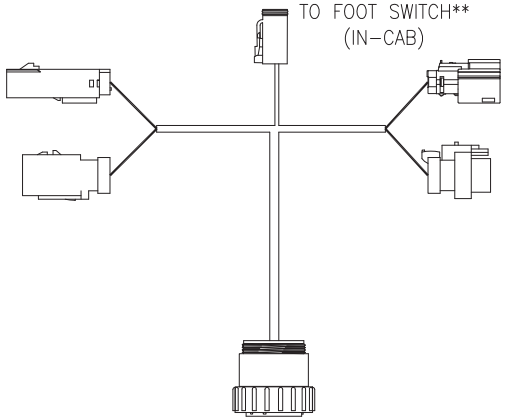
RAVEN ISOBUS CABLING



CABLE, ISO IMPLEMENT
EXTENSION TEE
12" - 115-0171-960
6' - 115-0171-961
12' - 115-0171-931
17' - 115-0172-035
24' - 115-0171-932
36' - 115-0171-933

NOTE:

* FOR SYSTEMS ALREADY EQUIPPED WITH JOHN DEERE ISO ECU'S, USE ADAPTER CABLE P/N 115-0171-958



**USE 10' FOOT SWITCH EXT CABLE(S): 115-0171-810

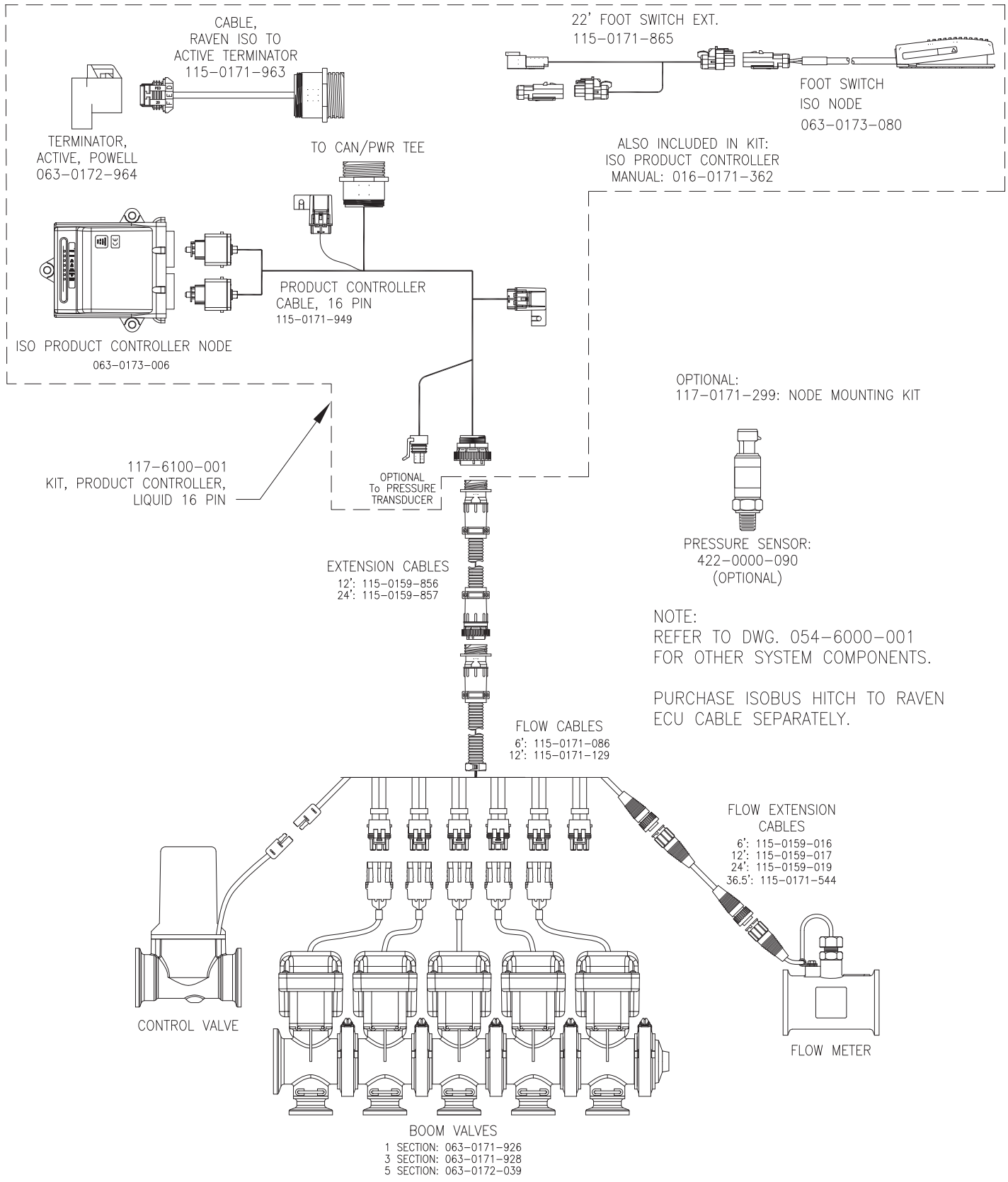
1) PLANTER KIT - SEE 4XXX FAMILY

2) SPRAYER/SPREADER KIT - SEE 6100 FAMILY

3) NH3 TOOLBAR KIT - SEE 6300 FAMILY

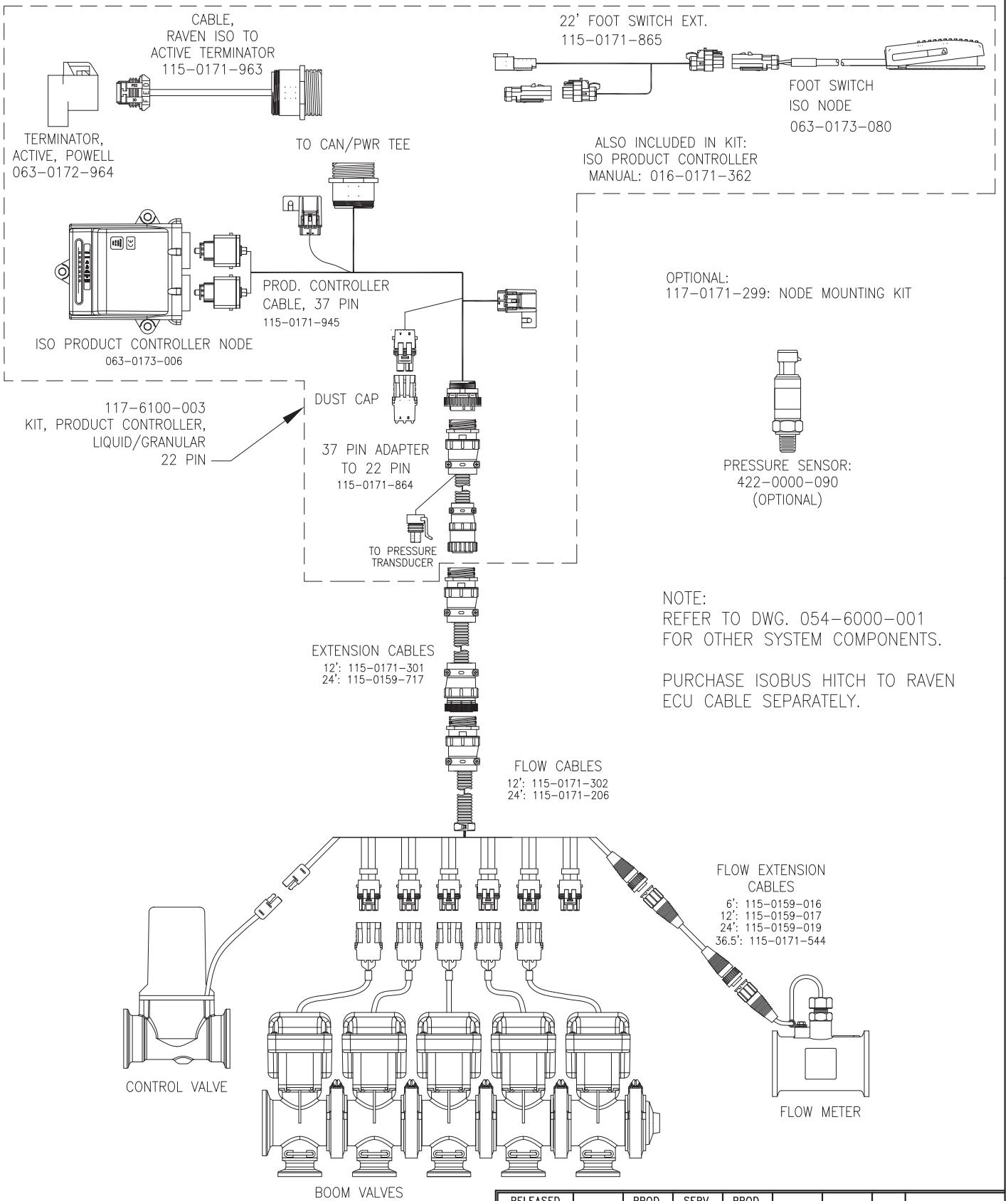
RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	JAB	AT	TLH	DLF	MAP	A	054-6000-001
5/10/12	E18877	JAB	AT	CAF	CRS	JJP	B	054-6000-001

ISO PRODUCT CONTROLLER LIQUID SYSTEM
16 PIN PRODUCT CABLE



RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	JAB	AT	TLH	DLF	MAP	A	054-6100-001

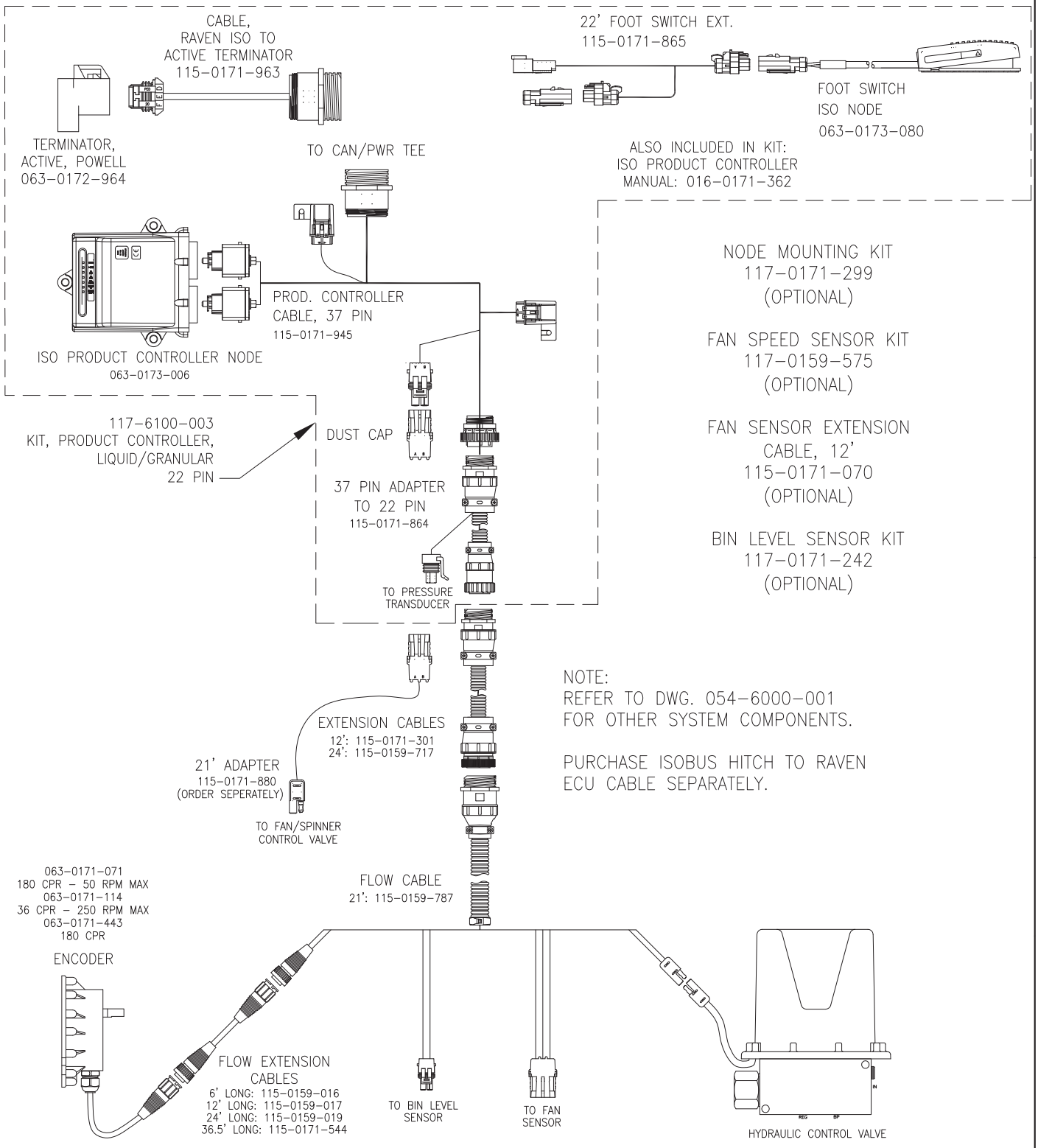
ISO PRODUCT CONTROLLER LIQUID SYSTEM
22 PIN PRODUCT CABLE



RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	JAB	AT	TLH	DLF	MAP	A	054-6100-003

PAGE 1 OF 2

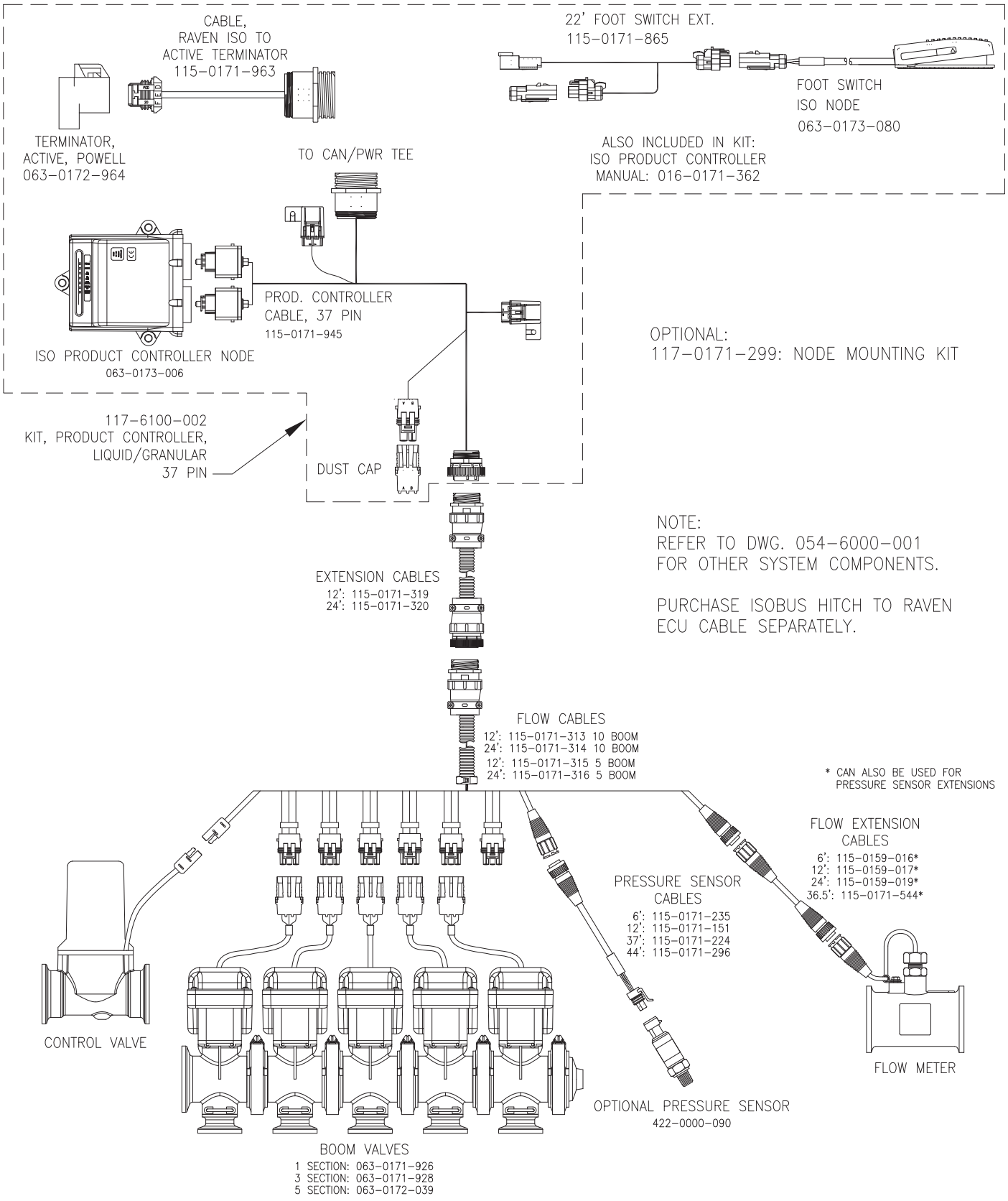
ISO PRODUCT CONTROLLER GRANULAR SYSTEM
22 PIN PRODUCT CABLE



RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	JAB	AT	TLH	DLF	MAP	A	054-6100-003

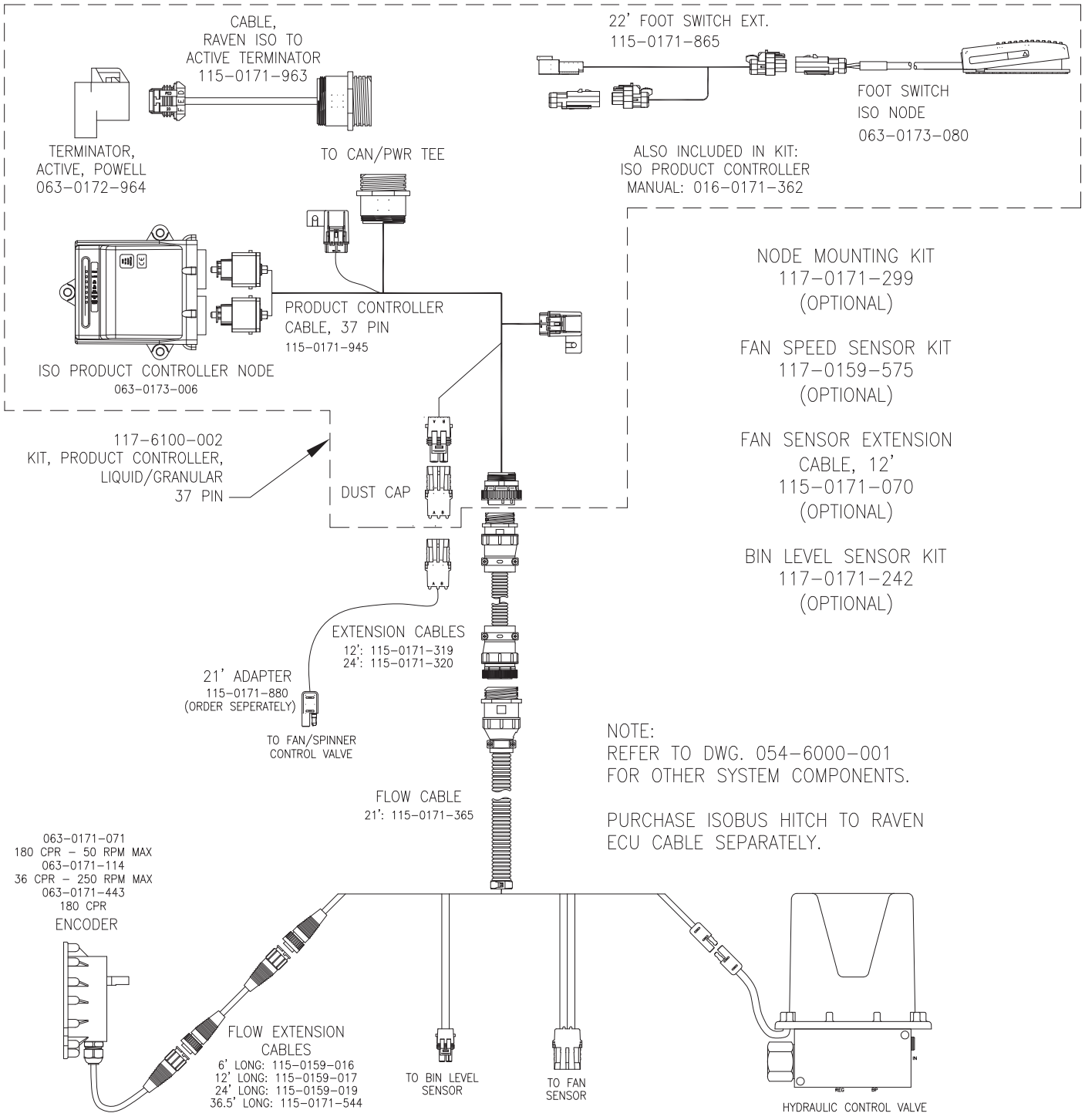
PAGE 2 OF 2

ISO PRODUCT CONTROLLER LIQUID SYSTEM
37 PIN PRODUCT CABLE



RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	JAB	AT	TLH	DLF	MAP	A	054-6100-002

ISO PRODUCT CONTROLLER GRANULAR SYSTEM
37 PIN PRODUCT CABLE



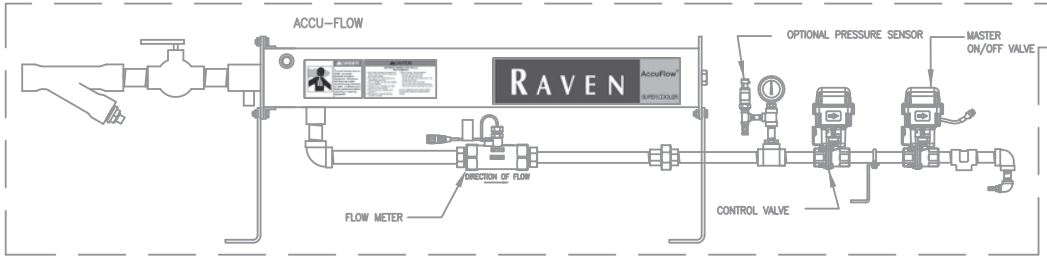
RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	JAB	AT	TLH	DLF	MAP	A	054-6100-002

PAGE 2 OF 2

ISOBUS ACCUFLOW, 6 SECTION BAR

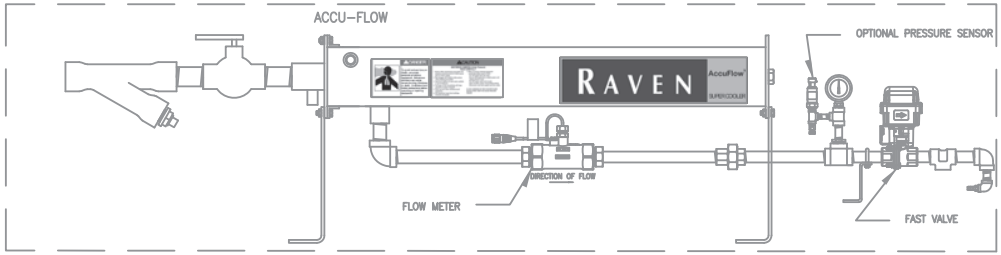
REFER TO SAFETY SECTION IN MANUAL

ACCUFLOW KIT, TWO VALVE
117-0171-384 -KIT INCLUDES SPACE SAVER KIT (SHOWN WITHOUT SPACE SAVER KIT)



VAPOR TUBES SOLD SEPERATELY
3/4"- 117-0171-409 (2 TUBE KIT)
1/2"- 117-0171-410 (4 TUBE KIT)

ACCUFLOW KIT, FAST VALVE
117-0171-386 -KIT INCLUDES SPACE SAVER KIT (SHOWN WITHOUT SPACE SAVER KIT)



VAPOR TUBES SOLD SEPERATELY
3/4"- 117-0171-409 (2 TUBE KIT)
1/2"- 117-0171-410 (4 TUBE KIT)

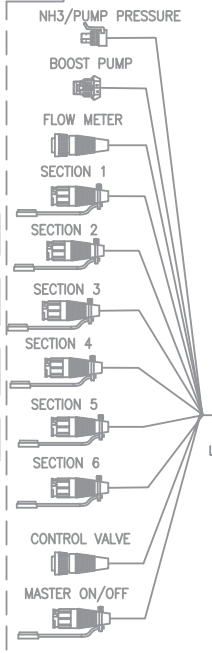
ISOBUS ACCUFLOW HP 6 SECTION BAR ELECTRONICS KIT
117-6300-002

TERMINATOR, ACTIVE, POWELL
063-0172-964

CABLE, RAVEN ISO TO ACTIVE TERMINATOR
115-0171-963

22' FOOT SWITCH EXT.
115-0171-865

FOOT SWITCH ISO NODE
063-0173-080



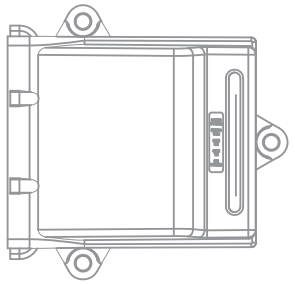
TO CAN/PWR TEE

REMOTE PROXIMITY SENSOR

HC POWER 15 AMP

HC POWER 15 AMP EACH

LOGIC POWER 5 AMP



CAN ACCUFLOW HP CABLE
6 SECTION
115-0171-947

ALSO INCLUDED IN KIT:
NODE MOUNTING BOLTS
ISO PRODUCT CONTROLLER
MANUAL: 016-0171-362

ISO PRODUCT CONTROLLER NODE
063-0173-006

SECTION ON/OFF VALVE 1"
063-0172-978
UP TO 6 ADDITIONAL VALVES

CHECK VALVE ASSY MULTI-SECTION
063-0173-030

ON/OFF VALVE EXTENSION CABLES: (OPTIONAL)
6': 115-0171-832
12': 115-0171-833
24': 115-0171-834

NODE MOUNTING KIT (OPTIONAL): 117-0171-299

NOTE:

REFER TO DWG. 054-6000-001 FOR OTHER SYSTEM COMPONENTS.
PURCHASE ISOBUS HITCH TO RAVEN ECU CABLE SEPARATELY.

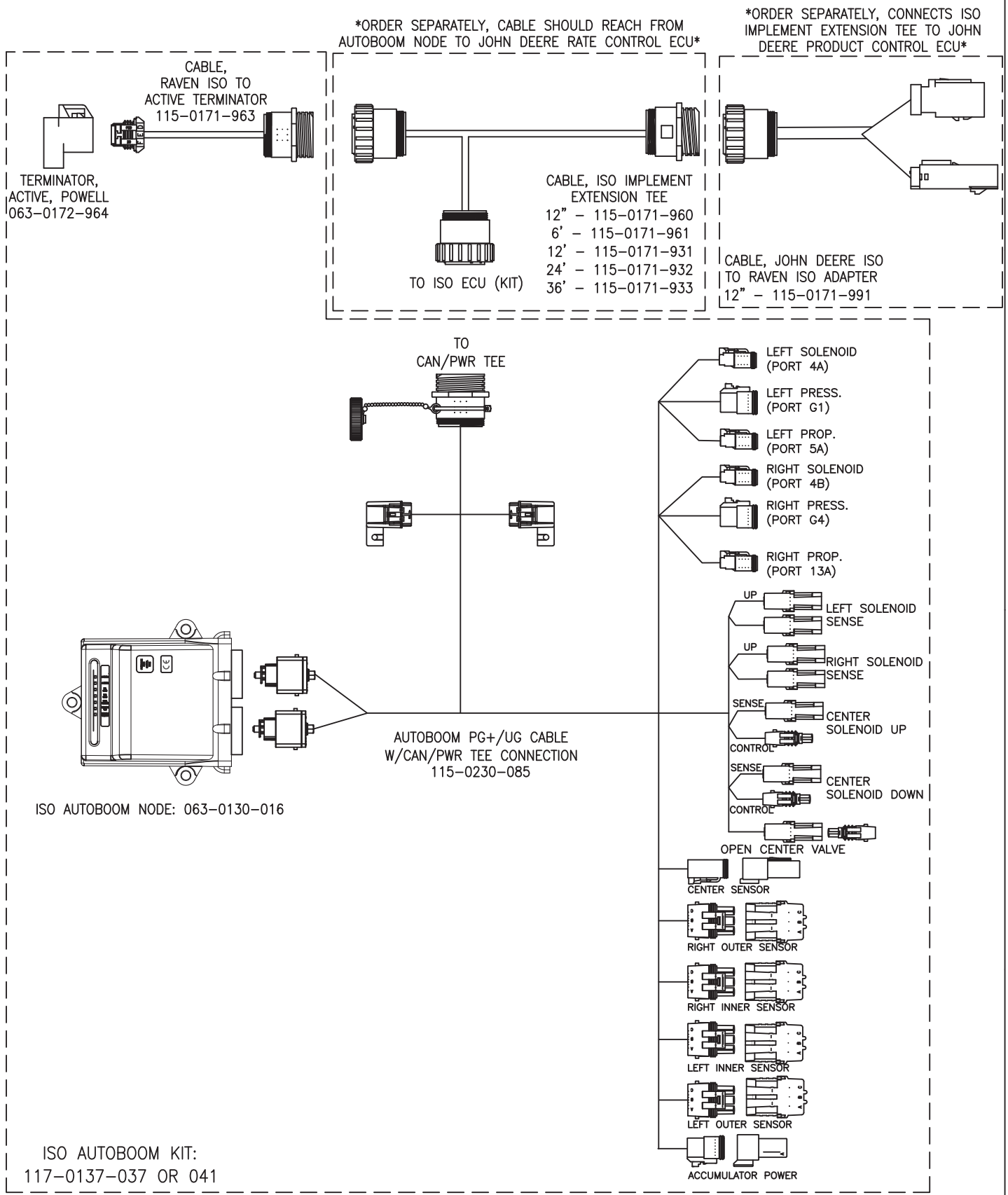
Optional:

PROXIMITY SENSOR KIT
117-0171-298

PROX SENSOR EXTENSION CABLE, 20'
115-0171-501

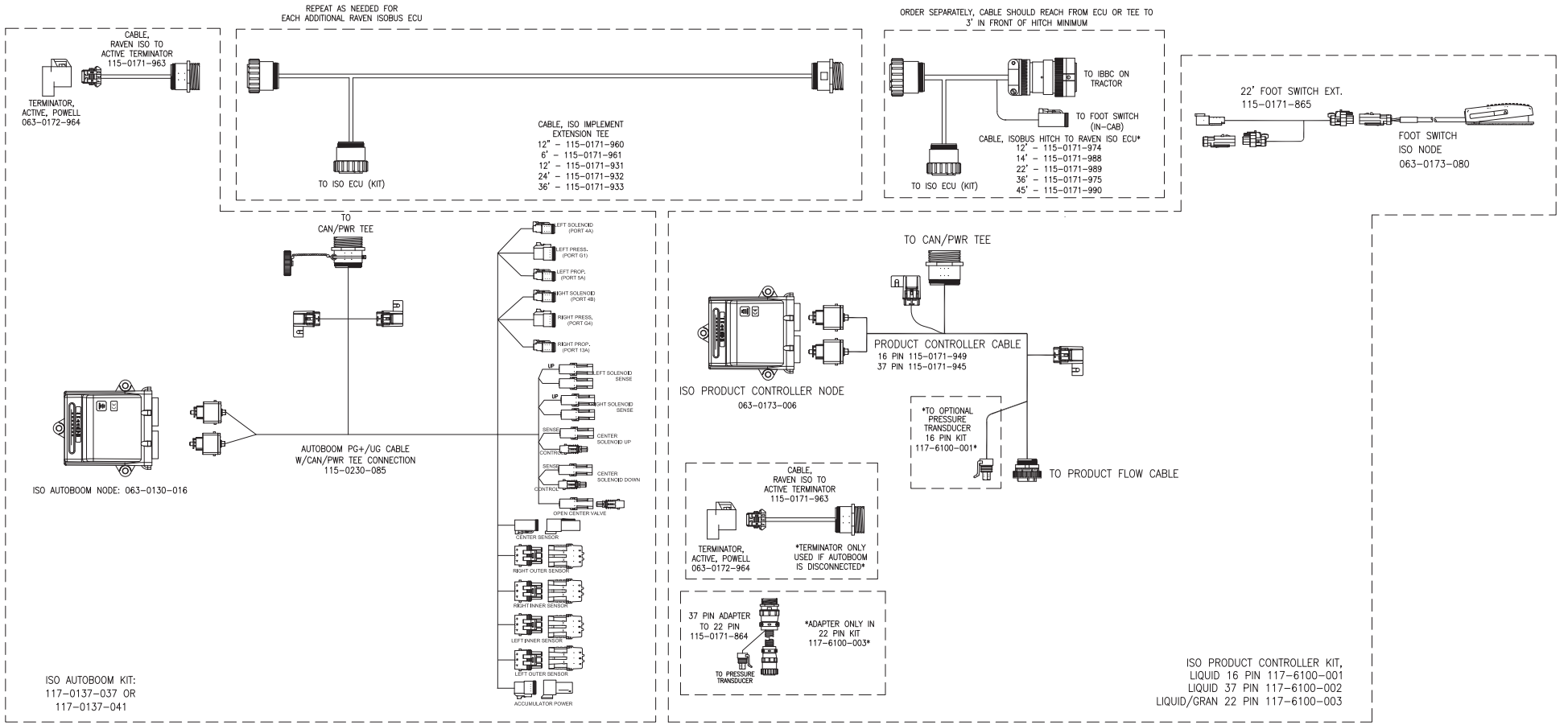
RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
10/18/10	E16352	JAB	AT	TLH	DLF	MAP	A	054-6300-002
5/26/11	E17536	JAB	TAC	GLE	CRS	AJK2	B	054-6300-002

RAVEN ISO AUTOBOOM WITH JOHN DEERE PRODUCT CONTROL



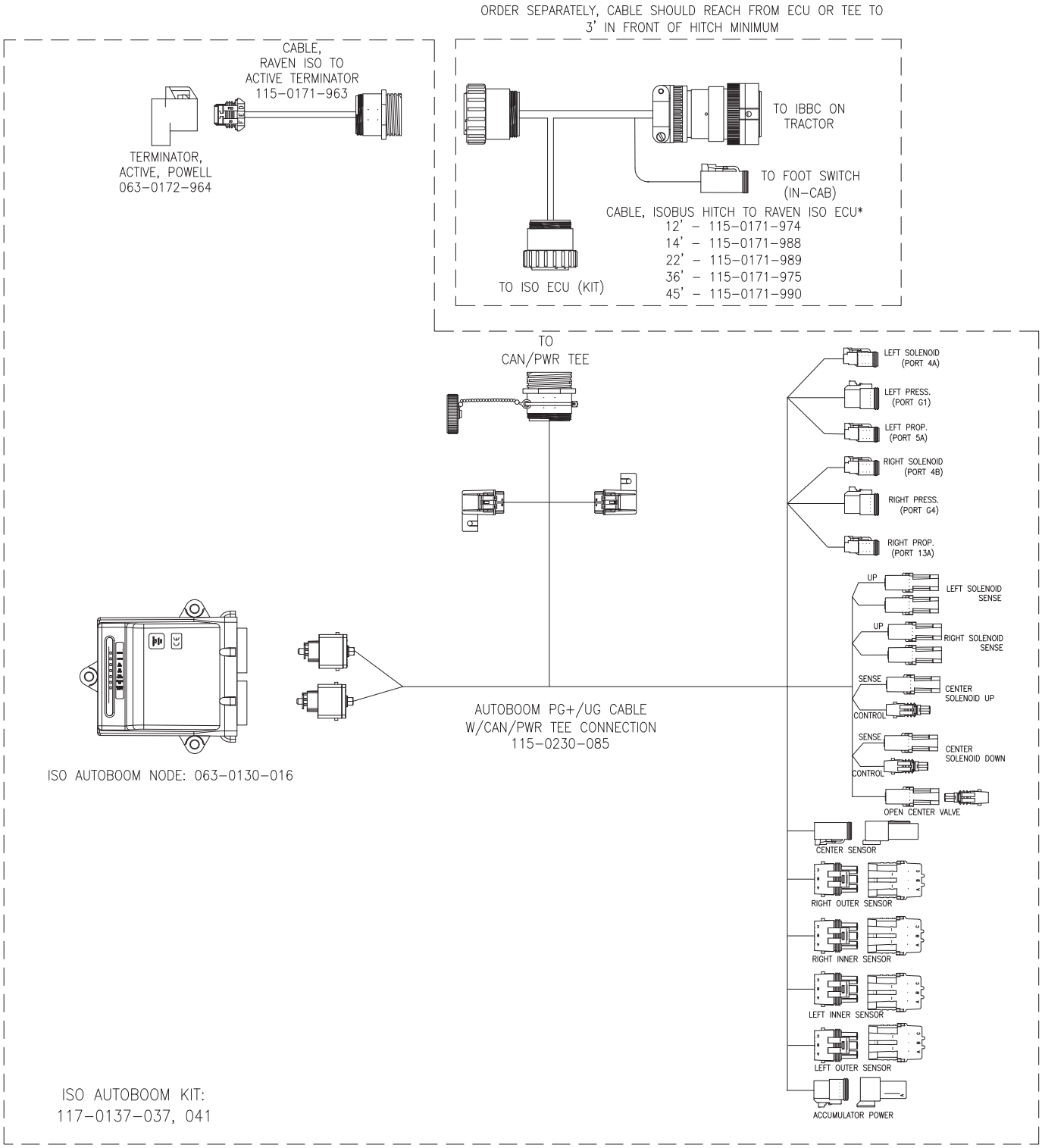
RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
5/24/11	E17497	BDB	TAC	ADA	NOM	AJK2	A	054-6130-004

RAVEN ISO AUTOBOOM WITH RAVEN ISO RATE CONTROL



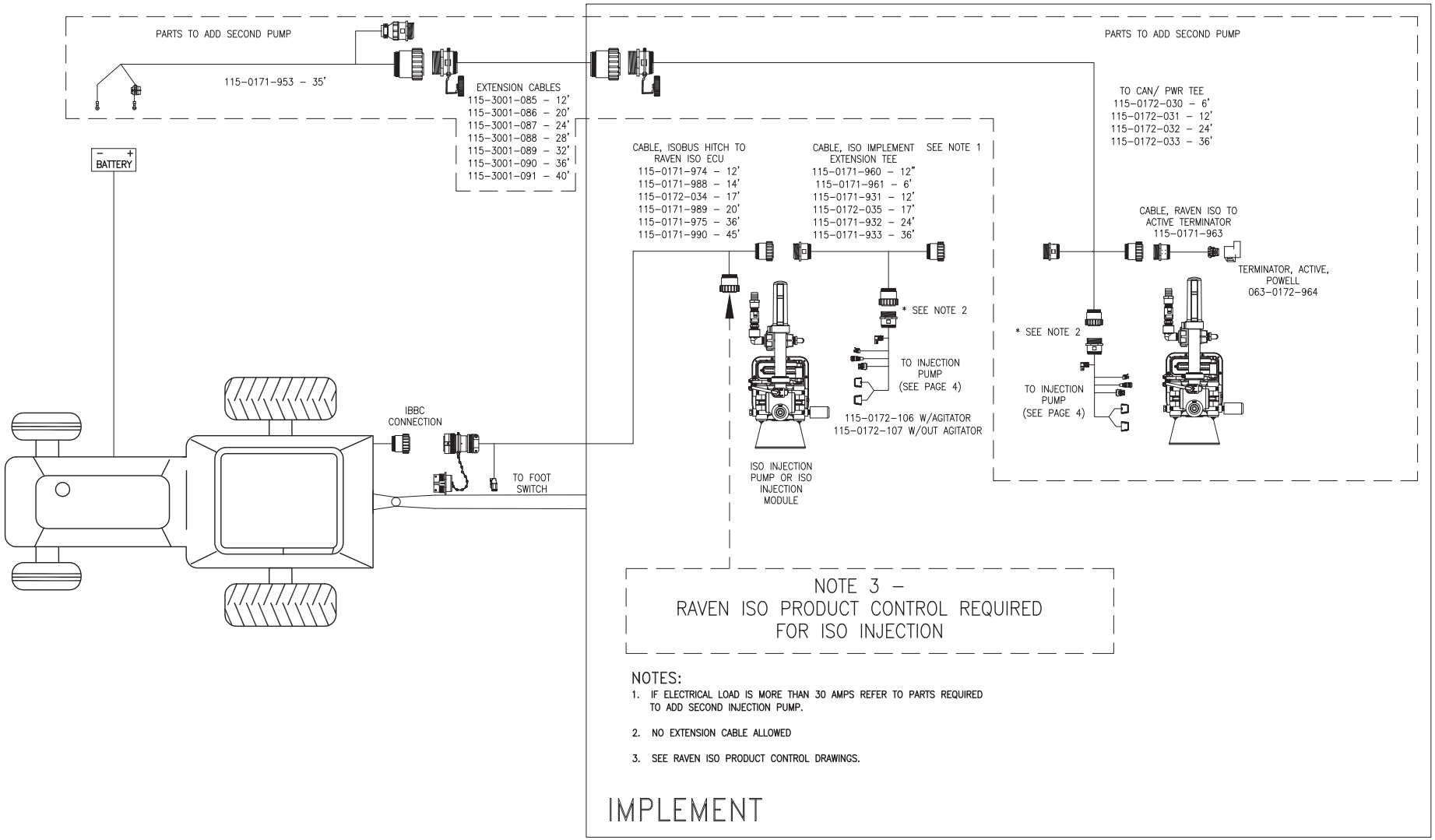
RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
3/31/11	E17401	BDB	TAC	ADA	NOM	MAP	A	054-6130-005

ISO AUTOBOOM WITHOUT ISO PRODUCT CONTROL



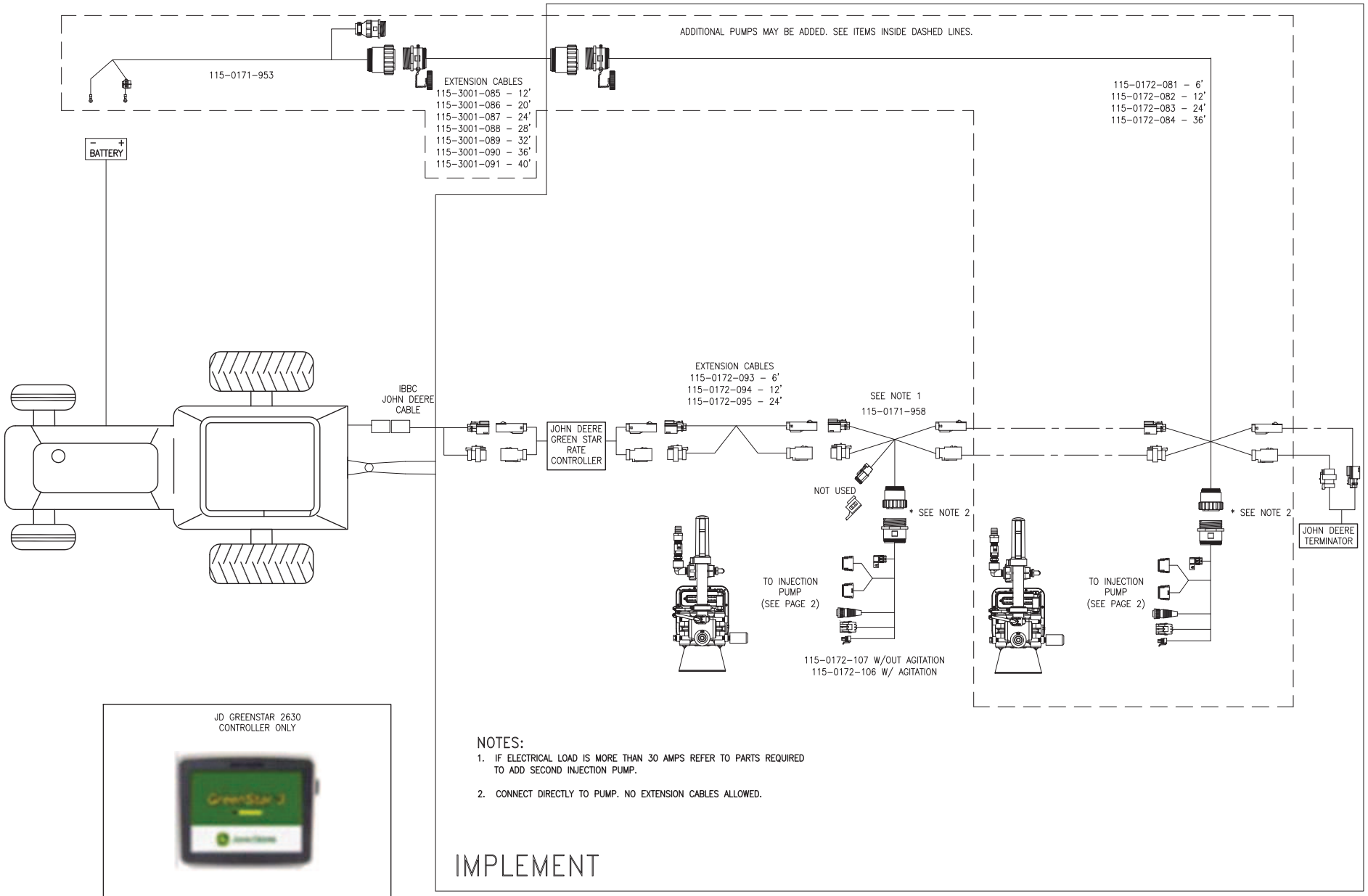
RELEASED DATE	ECO NO.	PROD. MGR.	SERV. MGR.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
3/31/11	E17401	BDB	TAC	ADA	NOM	MAP	A	054-6130-006

RAVEN ISO PRODUCT CONTROL WITH ISO INJECTION



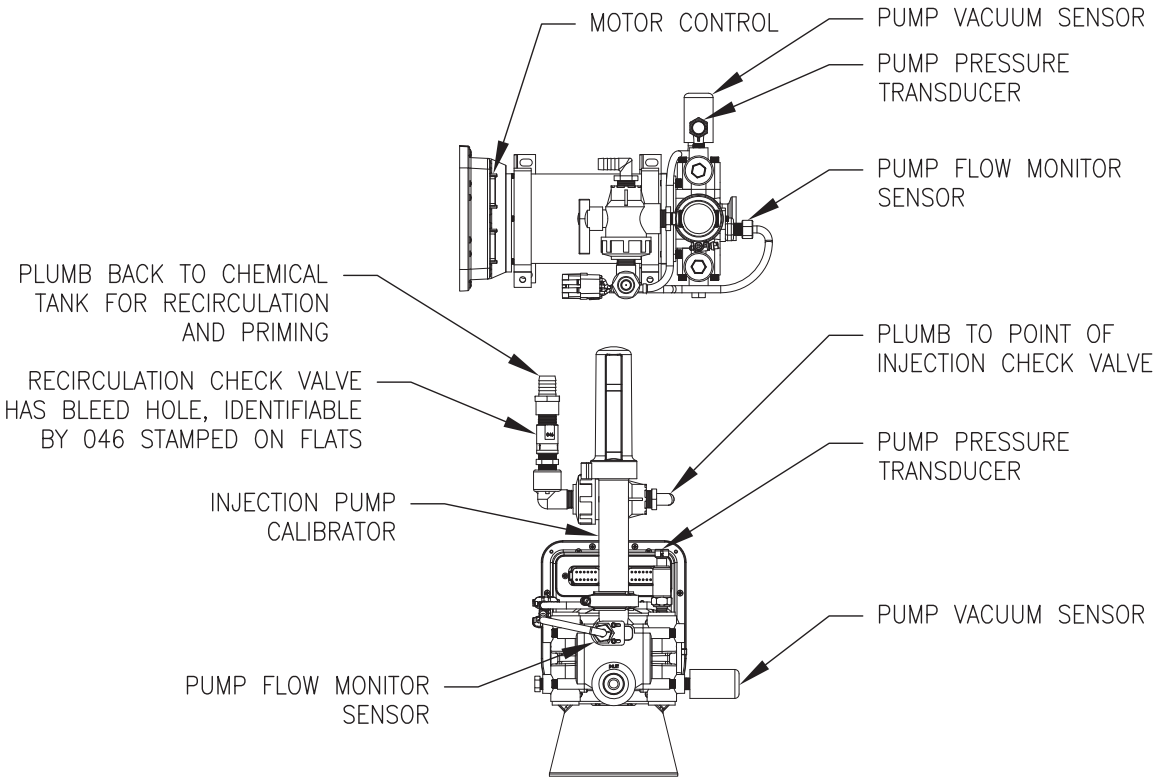
RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
7/19/12	E19867	JAB	AT	GLE	NAP	AJK2	C	054-6100-006
6/5/13	E21514	GLE	AT	BAY	TET	JJP	D	054-6100-006

JOHN DEERE GREENSTAR RATE CONTROL (GRC) WITH RAVEN ISO INJECTION



RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
7/19/12	E19867	JAB	AT	GLE	NAP	AJK2	C	054-6100-006
6/5/13	E21514	GLE	AT	BAY	TET	JJP	D	054-6100-006

ISO, DIRECT CHEMICAL INJECTION


MOTOR CONTROL
PUMP VACUUM SENSOR
PUMP PRESSURE TRANSDUCER
PUMP FLOW MONITOR SENSOR
PLUMB BACK TO CHEMICAL TANK FOR RECIRCULATION AND PRIMING
RECIRCULATION CHECK VALVE HAS BLEED HOLE, IDENTIFIABLE BY 046 STAMPED ON FLATS
INJECTION PUMP CALIBRATOR
PLUMB TO POINT OF INJECTION CHECK VALVE
PUMP PRESSURE TRANSDUCER
PUMP VACUUM SENSOR
PUMP FLOW MONITOR SENSOR

Sidekick Pro™ ISO BY RAVEN

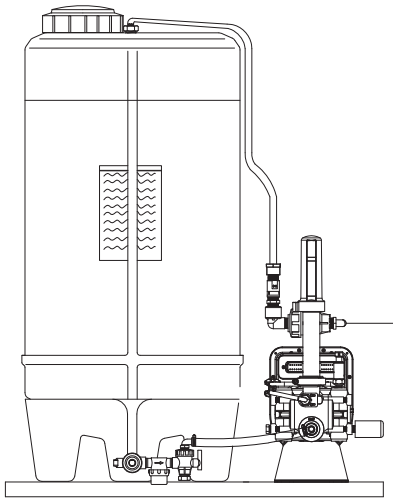
NOTE *****
ISO PUMPS ARE NOT INTERCHANGEABLE WITH SIDEKICK PRO, OR DEERE SPECIFIC INJECTION ON SELF PROPELLED SPRAYERS

SELECT ISO PUMP/MODULE KIT:

1. KIT, INJECTION W/ CALIBRATOR, 1–40 OZ/MIN: 063–0173–420
2. KIT, INJECTION W/ CALIBRATOR, 5–200 OZ/MIN: 063–0173–421
3. KIT, INJECTION MODULE W/ CALIBRATOR, 24 GAL, 1–40 OZ/MIN: 063–0173–422
4. KIT, INJECTION MODULE W/ CALIBRATOR, 24 GAL, 5–200 OZ/MIN: 063–0173–423

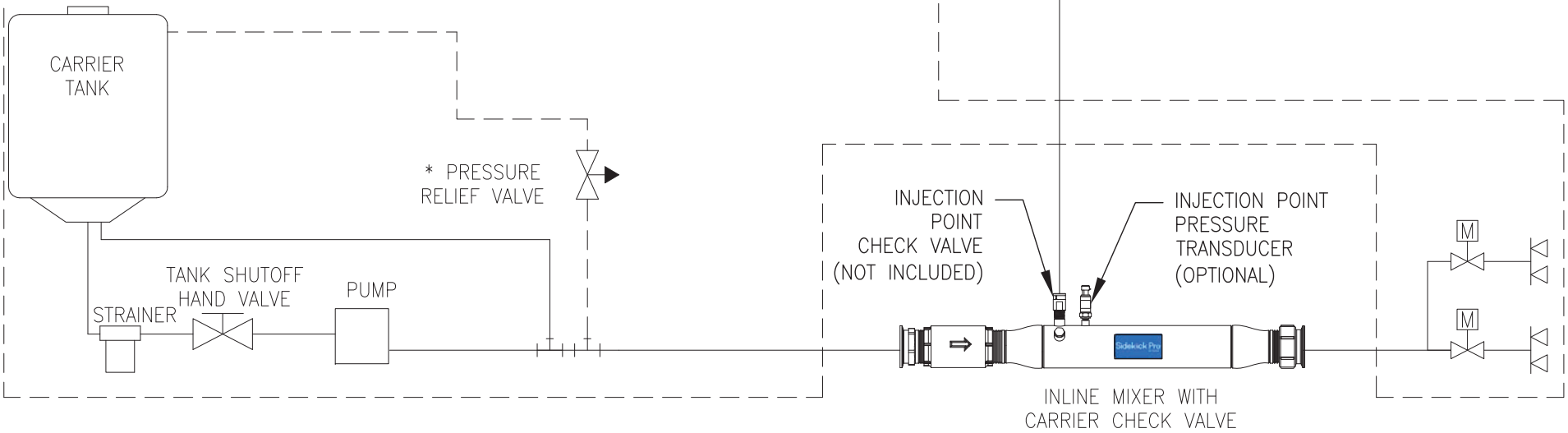
RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
7/19/12	E19867	JAB	AT	GLE	NAP	AJK2	C	054–6100–006
6/5/13	E21514	GLE	AT	BAY	TET	JJP	D	054–6100–006

PLUMBING DIAGRAM



* SEE PRICE BOOK PAGES FOR PART NUMBERS

BASIC SPRAYER CARRIER WITH INJECTION ADDED



RELEASED DATE	ECO NO.	PROD. MGR.	SERV.	PROD. CHAMP.	ENG.	DRAFT.	REV.	DRAWING NO.
7/19/12	E19867	JAB	AT	GLE	NAP	AJK2	C	054-6100-006
6/5/13	E21514	GLE	AT	BAY	TET	JJP	D	054-6100-006

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